TEC

TEC Electronic Cash Register

MA-1650-4 SERIES

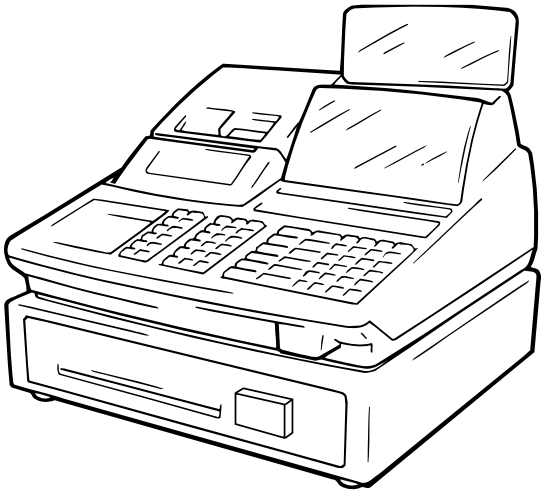
Owner's Manual

S/A Level Operators Guide

S/A Level Manager's Guide

M/S Level Operator's Guide

M/S Level Manager's Guide



TOSHIBA TEC CORPORATION

NOTICE

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reason-able protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense. Changes or modifications not expressly approved by manufacturer for compliance could void the user's authority to operate the equipment.

WARNING

"This Class A digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations."

"Cet appareil numénque de la classe A respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada."

1. STAND-ALONE LEVEL OPERATOR'S GUIDE

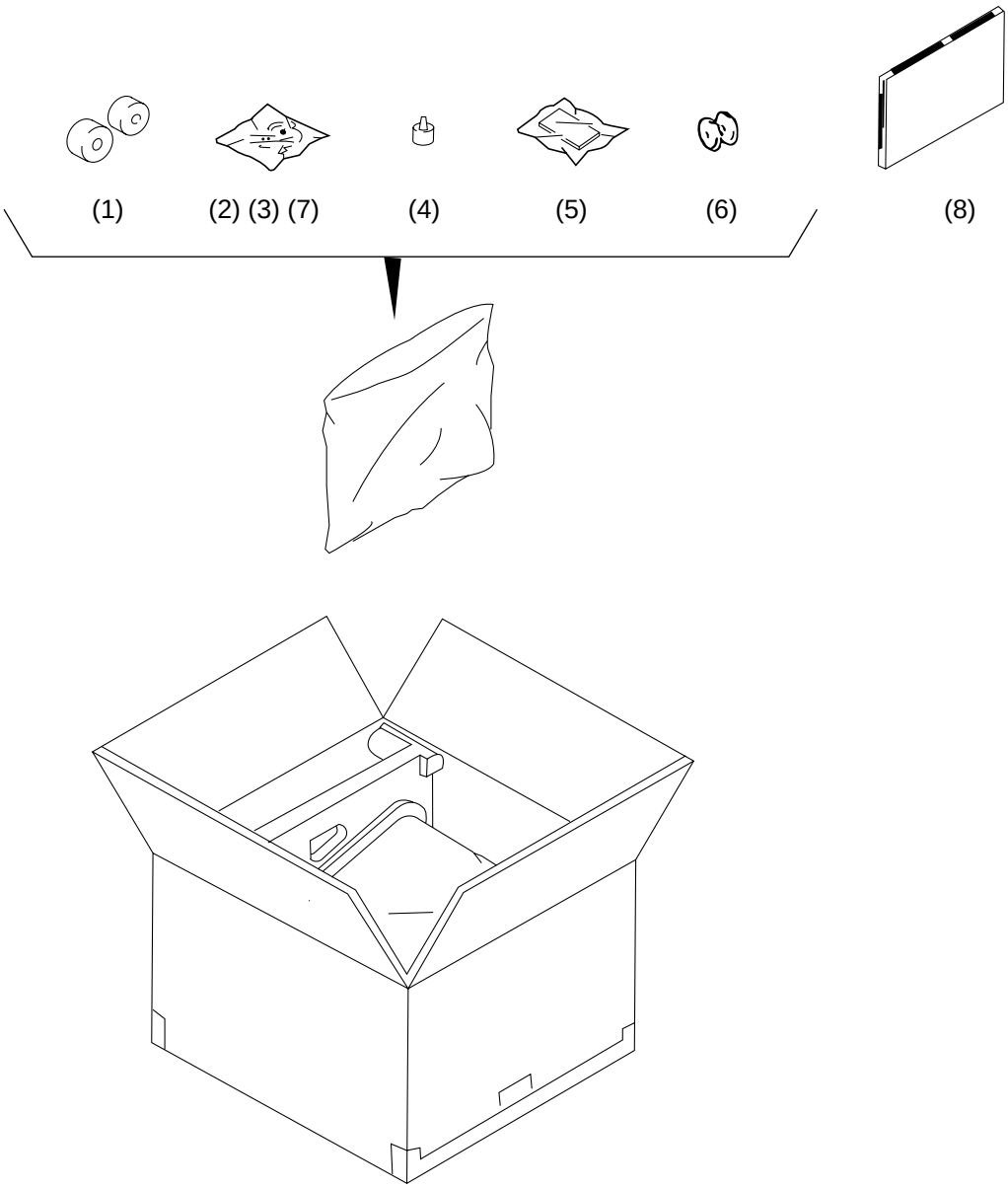
TABLE OF CONTENTS

1. TO OUR CUSTOMERS

Thank you for choosing the TEC electronic cash register MA-1650 series. This instruction manual provides a description of the functions and handling of this register and should be read carefully to ensure optimum performance. Since every consideration has been given to safety and reliability, there is no danger of damaging the machine by incorrect operation.
Please refer to this manual whenever you have any questions concerning the machine. This machine has been manufactured under strict quality control and should give you full satisfaction. However, if the machine is damaged during transit, or there are any unclear points in this manual, please contact your local TOSHIBA TEC representative.

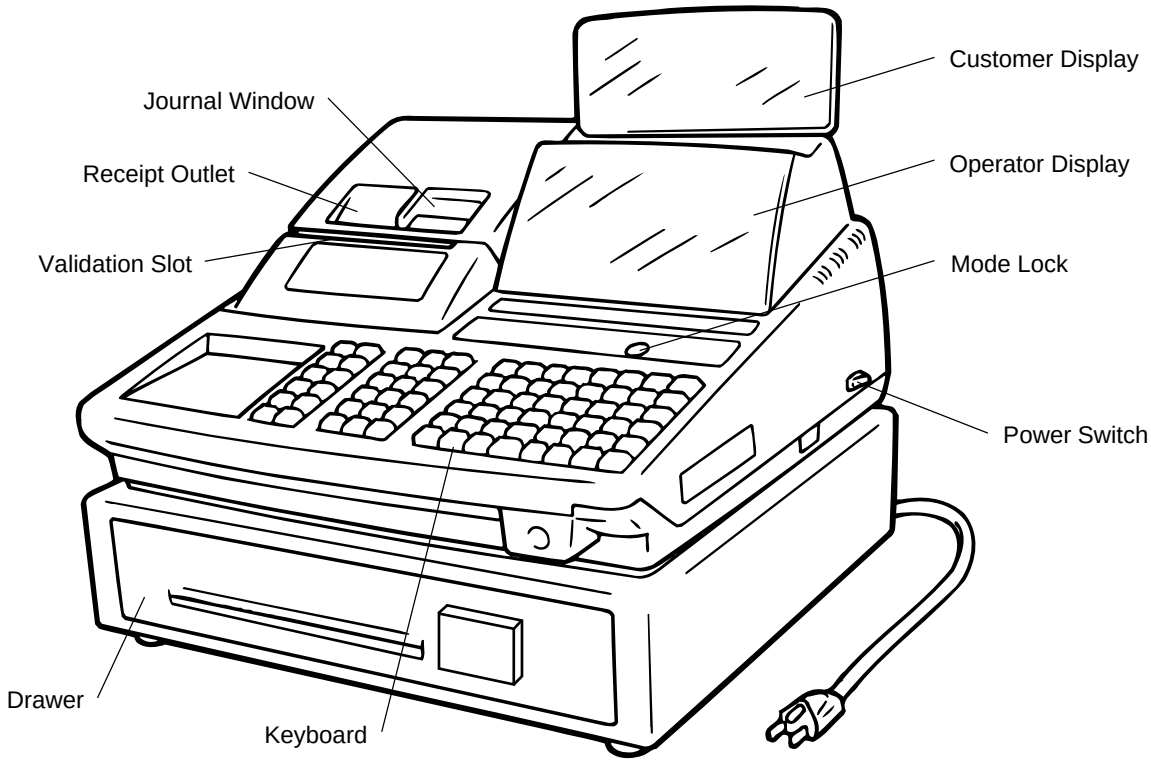
- The specifications described in this manual may be modified by TOSHIBA TEC, if necessary.
- Be sure to keep this manual for future reference.

2. UNPACKING



(1) Paper Roll 45 mm x Ø50 mm (2 pcs.)
(2) Mode Key
(**REG** Key, **MGR** Key, **MA** Key, **S** Key; 2 pcs. respectively)
(3) Receipt Cover Key (2 pcs.)
(4) Stamp Ink (1 pc.)
(5) Ribbon Cassette (1 pc.)
(6) Journal Reel (1 pc.)
(7) Drawer Key (2 pcs.)
(8) Owner's Manual (1 pc.)

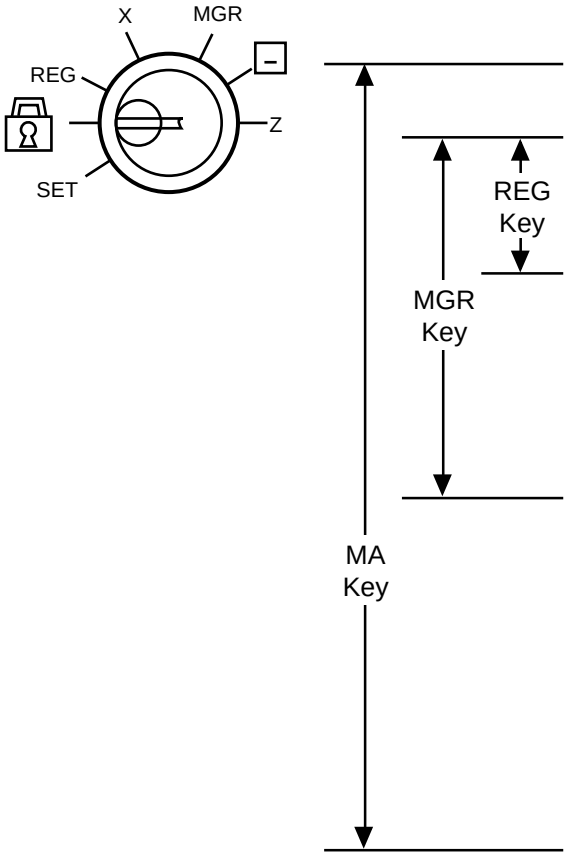
3. APPEARANCE AND NOMENCLATURE



- Power Switch ..... The power switch is provided at the right-hand side of the cabinet. The AC power is turned on when the switch is pushed to ON, and turned off when the switch is pushed to OFF.

4. MODE LOCK AND MODE SELECTOR KEYS

4.1 MODE LOCK



(POSITION) (FUNCTION)

SET ..... In this position, the register will allow programming operations.

 ..... (**LOCK** position) The register operations are locked when the Mode Lock is in this position. Meanwhile, the Display Message and the current time are displayed.

REG ..... Normal cash register operations are carried out in this mode. However, the operations requiring a Manager Intervention cannot be performed in this mode.

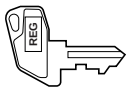
X ..... The sale totals in memory can be read and the programmed data can be verified in this position.

MGR ..... This position allows to register all normal cash register operations to be carried out in the "REG" mode and the operations requiring a Manager Intervention.

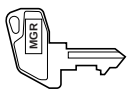
⊟ ..... This is the "Negative Mode", which automatically processes all the entries in the reverse way, i.e. positive items into negative, and the negative into positive. It is usually used to return or cancel all the items once purchased in a sale in the "REG" or "MGR" mode.

Z ..... All the resettable totals and their respective counters in memory will be read and reset in this position.

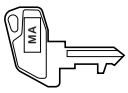
4.2 MODE SELECTOR KEYS



REG Key: The REG Key is used by the cashier or clerk who operates the register.



MGR Key: The MGR Key is used by the store manager or a person authorized by the manager.



MA Key: The MA Key is used by the store manager who will daily supervise the collection of money and the printout of transactions recorded by the register. This key is also used when programming the register.

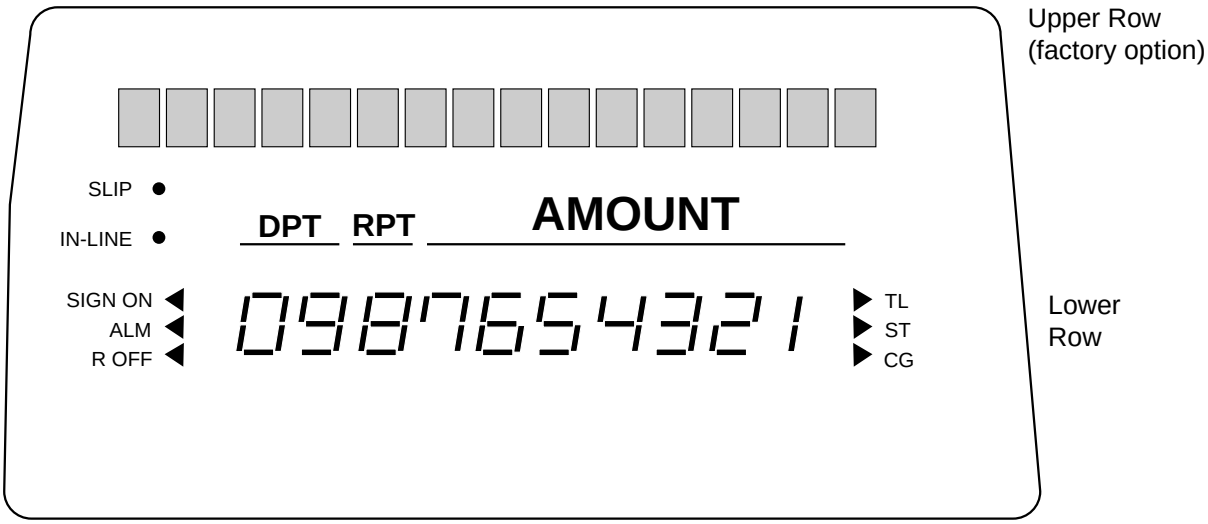
The keys may be inserted or pulled out at the **"LOCK"** or **"REG"** position.

In the OPERATOR'S GUIDE, functions and operations will be described within the range of the Mode Lock positions of **LOCK** and **REG** using the REG key. Since operations requiring other positions and keys are controlled by the store manager, they are described in the MANAGER'S GUIDE.

5. DISPLAY

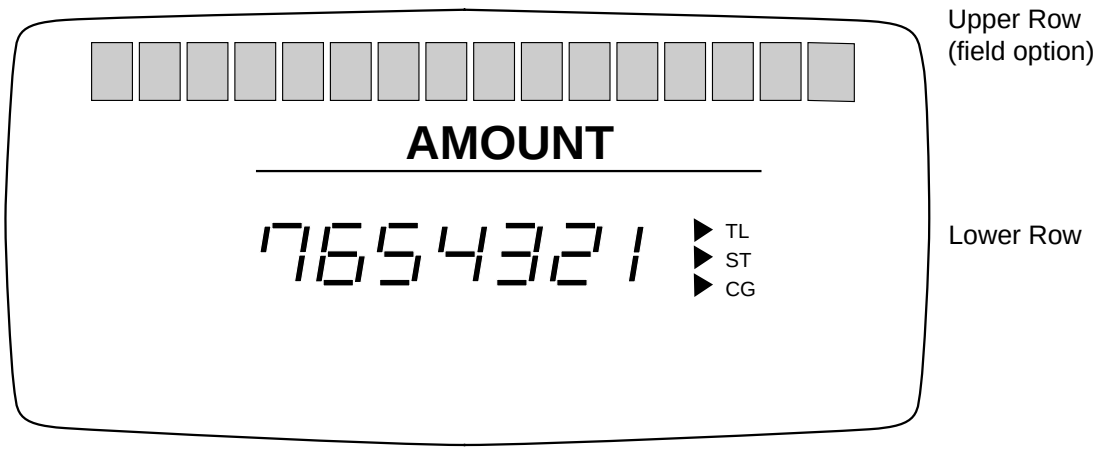
The operator display is located at the top of the register just above the keyboard.

OPERATOR DISPLAY (Front Display)



The customer display can be fixed as a rear display or moved to form a remote display. It can be moved up, down, to the right, and to the left, and thus is fully adjustable according to the position of the customer.

CUSTOMER DISPLAY (Rear or Remote Display)



5.1 **UPPER ROW** (16-digit dot windows)

Alpha/numeric characters are displayed here as messages, sale item descriptors, prompts for the operator, etc. depending on the Mode Lock position and the operation sequence.

(1) Mode Indications

"LOCK" Mode

If the display store message is preprogrammed, the message is displayed. Whether the message scrolls with maximum 64 characters or non-scrolls with maximum 16 characters is a program option. At the same time the current time is displayed in the lowest 5 digits of the Lower Row (example: 14-52 for the time 14:52).

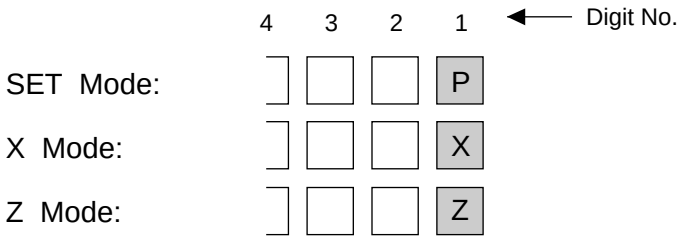
"REG", "MGR", or " ⊡ " Mode Initial Display

The message "LOG" is displayed in the lowest 3 digits of the Upper Row. It means that the cashier has signed OFF or signed OUT and thus the ECR is not operable for sales entries. (This display indication is applicable only when the Cashier Code Entry method is selected.) A Sign-ON or Sign-IN is expected to operate through the **[LOG/RECEIPT]** (or **[LOG]**) key in this case.

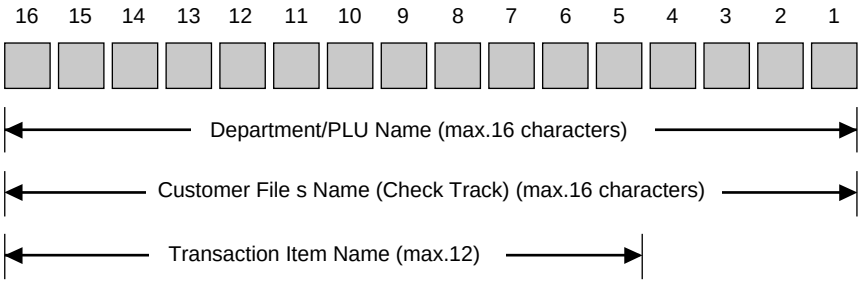
In the REG or MGR mode, a store message (described as the store message displayed in the LOCK mode above) can be displayed when there is no key-in operation takes place in 30 seconds. Whether it is displayed or not is a program option.
Whether or not a store message is displayed during cashier key ON status or cashier sign-ON is a program option.

Other Mode Initial Display

The mode symbol of 1 character is displayed in the lowest digit:

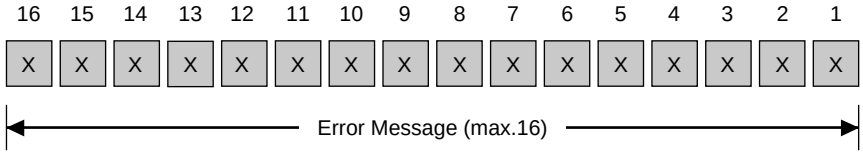


(2) Digit Range for Various Sales Items ("REG", "MGR", " ⊡ ")



(3) Error Messages (in any mode except "LOCK")

When an error occurs, an error message (programmable) is displayed, with an error buzzer generated (a long tone).



Read the Error Message, depress the **[C]** key to cancel the error status and tone, operate the sequence again after removing the cause of the error.
The following table shows the cause of the error.

ERROR MESSAGE TABLE

Error Message (Standard Setting)	Cause of the Error
O P E R A T I O N E R R O R	Key Sequence or Operation Procedure Error
M A N A G E R R E Q U I R E D	The operation requires a Manager Intervention.
V A L I D A T I O N C M P	The operation requires a validation print.
C L O S E D R A W E R	The drawer must be closed before the operation.
C O M P U L S O R Y C O D E	No code has been entered where it is compulsory.
C O M P D E P O S I T	Sub-link Department is compulsory, but not yet entered.
S C A L E R E Q U I R E D	The **[SCALE]** key has not been depressed where required.
S C A L E O U T	The scale is malfunctioning.
P C C O M M E R R O R	File Receive Error (when a PC is connected).
C O D E E R R O R	An undefined code has been entered, or the entered code has already been defined.
P R O G R A M E R R O R	An additional entry of new PLU or new customer file is not acceptable, because the memory of each table is full.
C A L L M A N A G E R	The card is not acceptable as a result of Negative Card checking.
D R A W E R L I M I T	A media pick up operation is now required.
L I N K P L U E R R O R	PLU linkage error such as when a sub-link PLU is not programmed in the Link-PLU Table.
V A L I D A T I O N E R R O R	Some key other than **[VALIDATE]** is depressed when a validation slip has been inserted into the validation slot.
C O M P U L S O R Y S L I P	The operation requires a endorsement print.
C D V E R R O R	Check Digit Value Error
C O M P C H E C K N O .	Performing the negative card check is necessary before finalizing a sale by a media key which has the compulsory status of the negative card check.
X / Z I N P R O G R E S S	Read/Reset operation is unavailable during the consolidation of the communication buffer by PC (or master terminal).
A L R E A D Y R E S E R V E D	Read/Reset/Reserve operation was attempted when reset data remained in the communication buffer. (in case of the program option to prohibit rewriting reset data in the communication buffer)
U N D E R A G E	Underage person has attempted to buy cigarette or alcoholic beverage.
C O M P Q U A N T I T Y	Quantity Entry Compulsion Error (when this compulsion status is programmed to a PLU item).
E F T C O N N E C T E R R	The EFT terminal is not connected.

Error Message (Standard Setting)	Cause of the Error
E F T T I M E O U T	Time-out condition on the EFT terminal
R E C E I P T R E Q U I R E D	Entry of new sale transaction is attempted before issuing the store receipt.
E F T C O M E R R O R	Communication error between the ECR and the EFT terminal.
M I S C E R R O R	Other errors

It is recommended to prepare a copy of the above table, and place it near the register.

5.2. LOWER ROW (10-digit 7-segment Numeric Display)

(1) Numeric Display

AMOUNT (7 digits) Displays the numeric data, such as amount, quantity, etc.
When the amount is negative, the symbol " ⊡ " is displayed as well.
NOTE: *When the following codes are being entered, the digits for "RPT" and "DPT" may be used as well (all 10 digits). On exceeding the 10 digits, the lowest 10 digits are being displayed.*
PLU Code (max. 13 digits as option)
Non-add Number (max. 18 digits)
Customer File No. (max. 12 digits)

DPT (2 digits) Displays the Department Code of the department item just entered. The department name is also displayed in the Upper Row. It stays lit when repeating the same department item entry.
When a PLU is entered, PLU name is displayed in the Upper Row.

RPT (1 digit) Displays the repeat count of the same Department or PLU item. The count is indicated from the second entry on, and only the lowest digit of the repeat count will be displayed even when the count exceeds nine (such as "0" for 10, "1" for 11, etc.)

5.3. TRIANGULAR LAMPS

SIGN ON ◀ This lamp turns lit only when the Cashier Code Entry method is selected. It lights up when a cashier has signed ON or signed IN. It goes out when the cashier has signed OFF or signed OUT, and the message "LOG" is displayed in the Upper Row instead.

ALM ◀ Lights up with the alarm buzzer generated to indicate that the last operation or numeric entry was an error. To clear the error status, depress the **[C]** key.

R OFF ◀ Lights up when the Receipt-OFF mode is declared by the **[LOG/RECEIPT]** (or **[RECEIPT]**) key. In this condition, no receipts will be issued for a sale to be entered. It goes out by depressing the **[LOG/RECEIPT]** (or **[RECEIPT]**) key again for Receipt-ON mode.

▶ TL Lights up on a finalizing operation with the total amount displayed when the sale is finalized without any amount tendered.

▶ ST Lights up when the **[ST]** key is depressed, indicating that the displayed amount is subtotal. The lamp is also illuminated when the **[TXBL TL]** or **[FSTL TEND]** key is depressed, indicating that the displayed amount is the taxable total or food-stampable total. It also lights up when the amount tendered is less than the sale total with the shortage amount (balance due) is displayed.

▶ CG When an amount tendering operation is performed, it lights up with the change due displayed.

5.4. STATUS LAMPS

SLIP ● Lights up when a validation slip is properly inserted to allow validation print. It flickers to require a validation when the validation compulsory status has been programmed on the last operation. It also flickers to require an endorsement print using the Remote Slip Printer or the Receipt/Journal Printer.

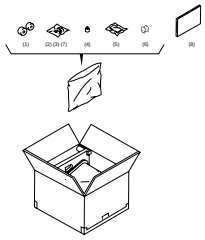
IN-LINE ● It is used when the ECR is used as an terminal in a Master-Satellite system. When the ECR is used as a stand-alone machine, this lamp is not used.

6. OUTLINE OF PREPARATION PROCEDURE BEFORE OPERATING THE ECR

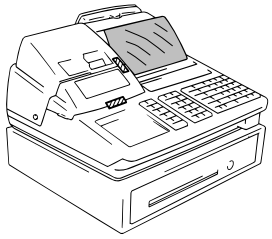
This chapter shows the outline of set-up procedure of the ECR before actually starting the ECR operation.

WARNING!
*Turn the **POWER SWITCH to OFF** before connecting the power cord.*

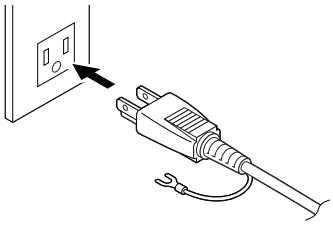
1 Remove the cash register from the carton, referring to Chapter **"2. Unpacking"**. And take out all the parts and accessories.



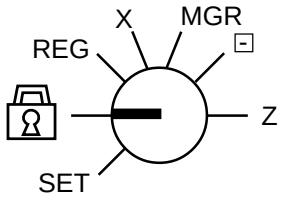
2 Remove the tapes and seals for holding parts or protecting the register surfaces.



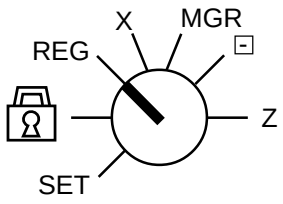
3 Plug the power cord of the register into a wall outlet. Make sure that the outlet voltage matches that of the power required for the register.



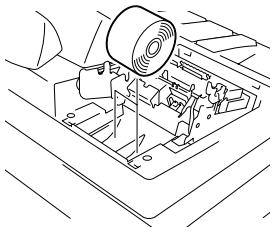
4 Insert the **REG** key into the Control Lock.



5 Turn the Mode Lock to the **REG** position with the power ON.



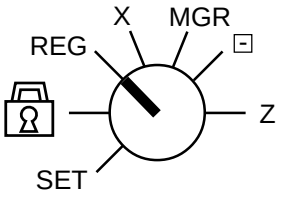
6 Install the Receipt and Journal rolls *(referring to the following section **"Installing the Receipt/Journal Roll"**)*.



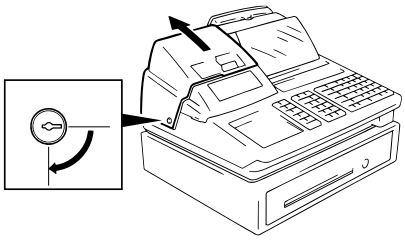
6.1 Installing the Receipt/Journal Roll

WARNING!
Care must be taken not to injure yourself with the paper cutter.

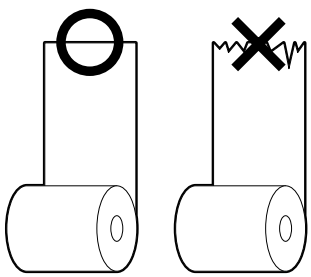
Installing the Receipt Roll



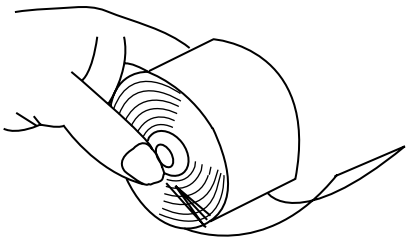
1 Turn the Mode Lock to the **REG** position with power ON.



2 To remove the Receipt Cover, insert the Receipt Cover Key to the Receipt Cover Lock, and then turn it 90 clockwise.

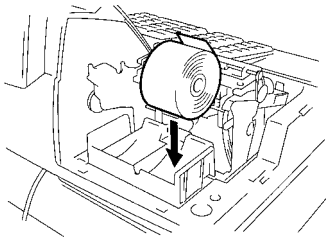


3 Cut the paper end to make it sharp.



4

Hold the paper roll so that the paper end will be fed from the bottom.



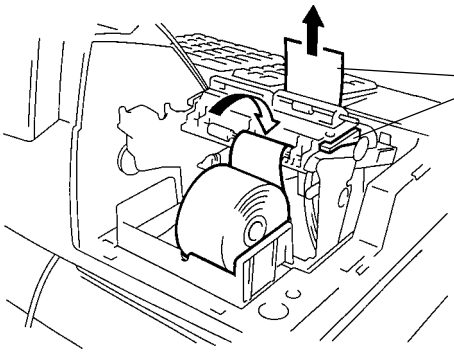
5

Place the paper roll in the outer side holder of the two roll holders.

6

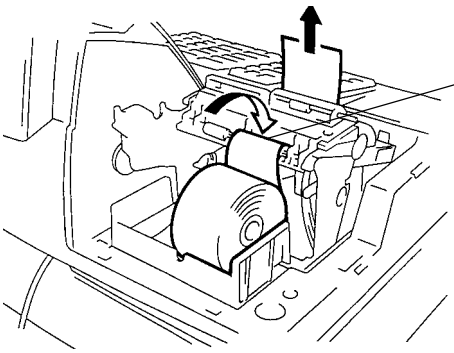
There are the following two ways of a receipt paper feed procedure.

A: Manual installation
B: Installation using the **[RF]** key



A: Manual installation

① Lift the green lever on the receipt side.
② Insert paper from the rear of the printer until the leading edge of paper comes out by 10 cm.
③ Lower the green lever.
④ Attach the receipt cover.



B: Installation using the **[RF]** key

① Insert paper from the rear of the printer until it won't go no further.
② Press the **[RF]** key to feed paper until the leading edge of paper comes out by 10 cm.
③ Attach the receipt cover.

Installing the Journal Roll

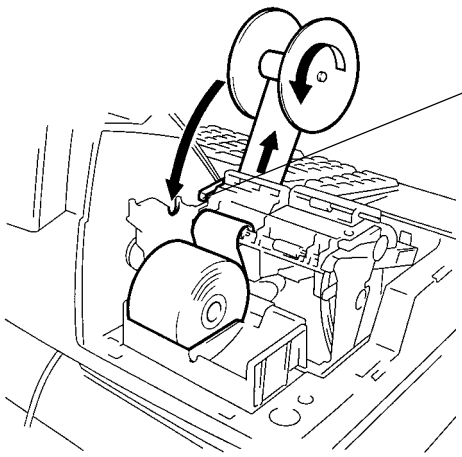
1

Follow Steps 1 to 5 for “Installing the Receipt Roll” on the preceding pages, except that the paper roll should be placed inner side holder of the two holders.

2

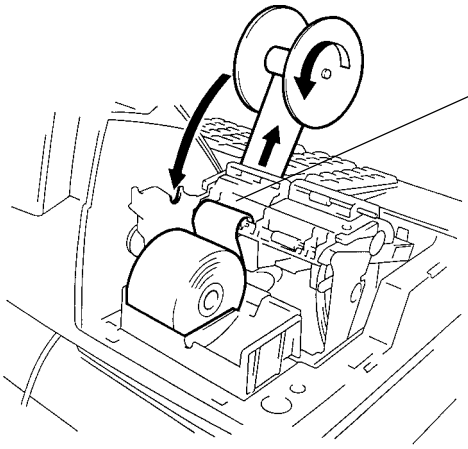
There are the following two ways of a journal paper feed procedure.

A: Manual installation
B: Installation using the **[JF]** key



A: Manual installation

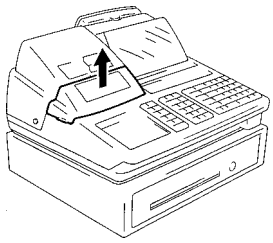
① Lift the green lever on the journal side.
② Insert paper from the rear of the printer until the leading edge of paper comes out by 30 cm.
③ Insert the leading edge of paper into the slit of the take-up reel to take up paper two or three times.
④ Place the take-up reel on the take-up holder.
⑤ Lower the green lever.
⑥ Attach the receipt cover.



B: Installation using the **[JF]** key

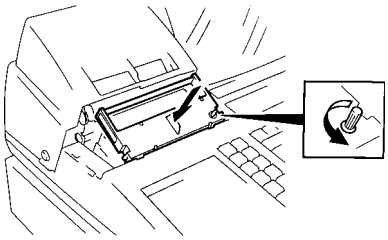
① Insert paper from the rear of the printer until it won’t go no further.
② Press the **[JF]** key to feed paper until the leading edge of paper comes out by 30 cm.
③ Insert the leading edge of paper into the slit of the take-up reel to take up paper two or three times.
④ Place the take-up reel on the take-up holder.
⑤ Attach the receipt cover.

6.2 Setting the Ribbon Cassette



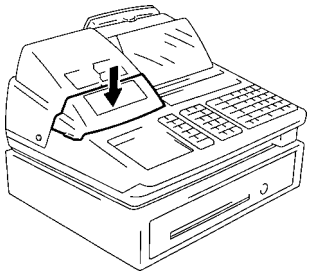
1

Detach the Ribbon Cover.



2

Set the Ribbon Cassette.
After setting the Ribbon Cassette, turn the knob of the Ribbon Cassette in the arrow direction several times to remove the slack on the ribbon.



3

Attach the Ribbon Cover.

7. CASHIER SIGNING OR CASHIER KEY OPERATIONS

The MA-1650 adopts one of the following cashier-identifying operations.

- CODE ENTRY METHOD, using the **[LOG/RECEIPT]** (or **[LOG]**) key.
- CASHIER KEY METHOD (hardware option), using Cashier Keys.
- CASHIER KEY METHOD, using **[CLK]** keys.

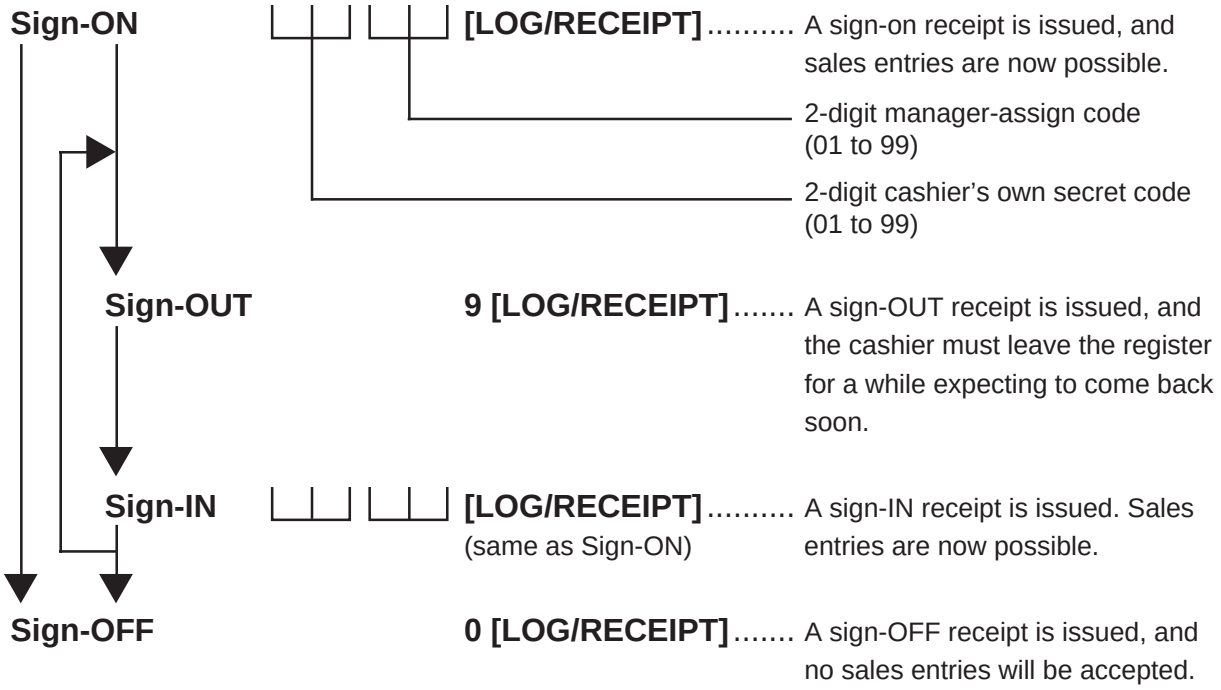
7.1 CODE ENTRY METHOD

Each cashier will sign-ON, sign-OFF, sign-IN, and sign-OUT through the **[LOG/RECEIPT]** (or **[LOG]**) key.

OPERATION: Mode Lock: REG (or, MGR or ⊡ with Manager Intervention)

(**[LOG/RECEIPT]** = **[LOG]**)

(1) For Single-drawer Machines



Sign-ON *..... to be operated to start the job.*
Sign-OUT *..... to be operated to leave the register for a while expecting to come back soon.*
Sign-IN *..... to be operated when the cashier comes back from a break declared by Sign-OUT.*
Sign-OFF *..... to be operated to end the job.*

NOTES:

1. *Sign-OUT may automatically be performed without operating "9* ***[LOG]****" on finalizing each transaction, including Check (or other non-cash media) Cashing, No-sale Exchange from/to Foreign Currencies, No-sale, Received-on-Account, Paid-Out, Loan, Pick Up if so set by a program option. When this option is selected, Sign-IN is always necessary before starting every transaction.*
2. *When the finalizing media key is programmed with Validation Compulsory or Endorsement Compulsory status, the automatic Sign-OUT will be executed after taking the validation or endorsement print of the media data.*

(2) For Multi-drawer Machines

Sign-ON ␣␣ **[@/FOR]** ␣␣ **[LOG/RECEIPT]**

By entering a Drawer No., the designated drawer will open on finalizing each sale by that cashier. It will cause an error if a Drawer No. already used by another cashier is entered.

Sign-OUT
Sign-IN } Same as those for Single-drawer Machines.
Sign-OFF

NOTES:
1. *A maximum of 4 different cashiers may sign-ON on a Multi-drawer Machine at the same time. To allow more than one cashier's sign-ON, the first cashier(s) must sign-OUT (not necessarily sign-OFF) before the next cashier signs ON. Accordingly, only the cashier being signed ON or IN can sign OUT or OFF.*
2. *When the Drawer No. entry and the **[@/FOR]** key are skipped in a sign-ON, the drawers will automatically be assigned to the cashiers from the smaller No. to the larger.*
3. *Performing sign-OFF automatically cancels the designation of the drawer. Therefore, at the next opportunity to perform sign-ON, the designation of another drawer is available. Performing sign-OUT cannot cancel the designation of the drawer.*

(3) Mode Changes With Signing Operations

When **Signed-ON** or **Signed-IN**:

The Mode Lock position changes are allowed within "LOCK", "REG", "MGR", and " ⊡ ". Changing to any other position will be an error.

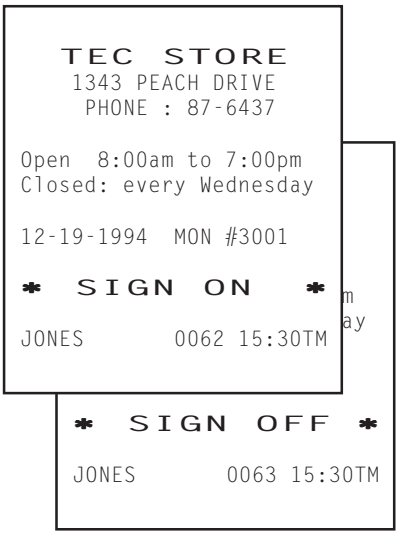
When **Signed-OUT**:

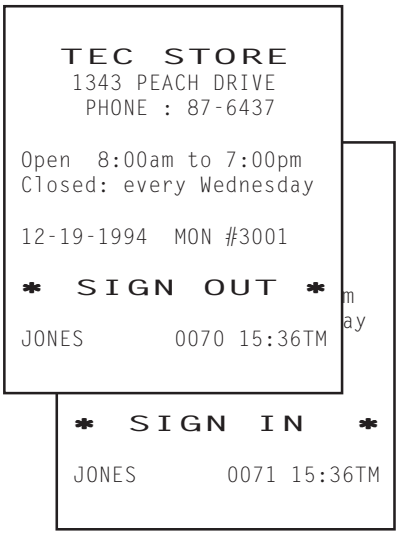
The Mode Lock may be turned to any position. However, cashier reports of the cashier being signed OUT cannot be taken in the "X" or "Z" position.

When **Signed-OFF**:

The Mode Lock may be turned to any position. Therefore, it is best for the cashier (or all the cashiers on a Multi-drawer Machine) to sign OFF before the Mode Lock is turned to the "LOCK", "X", "Z", or "SET" position.

-- SIGNING OPERATION RECEIPT PRINT FORMAT SAMPLES --



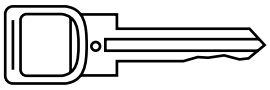


NOTE: *A program option provides a selection not to print nor issue receipts on any signing operation.*

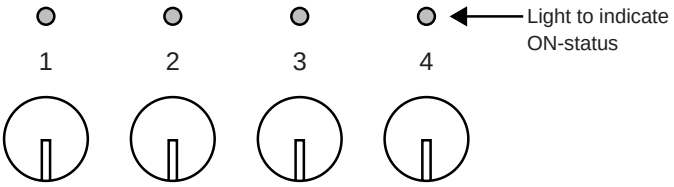
7.2. CASHIER KEY METHOD (Hardware Option)

When the **[LOG/RECEIPT]** (or **[LOG]**) key is not installed, the Push-stay Cashier Keys may be provided at the side of the Mode Lock:

Push-stay Cashier Locks and Keys



Cashier Locks 1 to 4



Cashier keys 1 to 4

Each key is assigned to each cashier. The register will not operate in the “REG”, “MGR”, or “ ⊡ ” mode unless one of these keys is inserted and pushed on or pushed-and-locked at the corresponding Cashier Lock. The light is lit when the key is in the ON-status.

Each of the keys may be inserted and pulled out in the neutral position marked with “1” to “4” in the above figure, and two ways are provided to set the Cashier Key to ON status:

PUSH-ON
When simply pushed on and released,the Cashier Key is set to ON status. This ON condition will be cleared by any of the following conditions:

1) when no key-in operations follow in three seconds.
2) when the transaction is finalized.
3) when another Cashier Key is pushed-on when outside a sale.
4) when the Mode Lock is turned to another position.

PUSH-AND-LOCK

When pushed and turned to the right, the ON status is locked until it is turned back to release and another Cashier Key is set to ON.

When another Cashier Key is attempted to push-and-lock, the register will entirely be locked.

If a Cashier Key has already been set to ON and a sale is under way, another Cashier Key will be disregarded if attempted to ON.

Under the CASHIER KEY METHOD, no receipts are issued, nor will the drawer open by setting a cashier key to the ON status.
The multi-drawer feature may be taken with the Push-stay Cashier Keys. In this case, each of the drawers 1 to 4 is assigned to each cashier of Cashier Keys 1 to 4.
The “SIGN ON” triangular lamp will not be lit in any occasion under the CASHIER KEY METHOD.
The light attached to each Cashier Lock will be lit instead.

7.3 CASHIER KEY METHOD ([CLK] Keys)

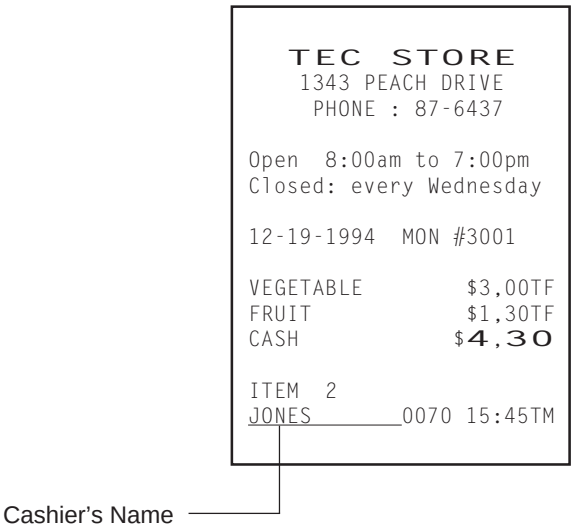
When the **[LOG/RECEIPT]** (or **[LOG]**) key is not installed, **[CLK]** keys (**[CLK 1]** to **[CLK 8]**; max. 8 keys may be provided on the ECR keyboard.)

Sale entries will be possible only when one of the **[CLK]** keys is depressed (in **“**REG**”**, **“**MGR**”**, or **“** ⊟ **”** mode). When the same **[CLK]** key is again depressed, the cashier is in Cashier OFF status.
A program option provides a selection to display or not display the ON-status cashier code (1 to 8) at the **“**DPT**”** digit on the Lower Row of the Operator Display.
The multi-drawer feature may be taken with the **[CLK]** keys. In this case, each of the drawers is assigned to the cashier of the following keys.

Drawer 1 to **[CLK 1]**
Drawer 2 to **[CLK 2]**
Drawer 3 to **[CLK 3]**
Drawer 4 to **[CLK 4]** to **[CLK 8]**

-- Cashier ID Print on Sale Receipts --

On every sale receipt (issued in **“**REG**”**, **“**MGR**”**, or **“** ⊟ **”** mode), the name of the cashier who has operated the entries of the sale is printed. The cashier name is programmable corresponding to each Cashier Key No. (under the CASHIER KEY METHOD) or manager-assign cashier code (under the CODE ENTRY METHOD).



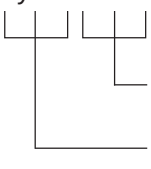
7.4 TRAINING MODE START AND END

When you have newly employed cashiers, you may provide some time for them to train their skills of operating the MA-1650. You are to start and end the Training Mode. Once entering the Training Mode, a cashier may operate just as ordinary sale entry operations. The data in the Training Mode are processed into the training cashier memory but not affect any actual sales data in business.

CONDITION Outside a sale, and in Cashier Signed-OFF condition for CASHIER CODE ENTRY Method

OPERATION FOR TRAINING MODES START

■ Code Entry Method



[LOG/RECEIPT] (or **[LOG]**) ..... A training-ON receipt is issued.

2-digit manager-assign code of a cashier with Training status (01 to 99)

2-digit cashier's secret code (01 to 99)

■ Cashier Key Method

Case 1: Set the Cashier Key programmed with Training status

Case 2: 99 ⟶ **[LOG/RECEIPT]** (or **[LOG]**) ..... A training-ON receipt is issued.

Fixed to 99 for training purposes.

ENTRIES IN TRAINING MODE

Registering operations are allowed by the trainees:

- All sale or transaction entry operations are possible in the Training Mode, except:
  1) The drawer will not open.
  2) The Consecutive No. on the receipt will not be incremented.
  3) Validation or Endorsement print is not available.
  4) Print occurs on receipt but not journal.

OPERATION FOR TRAINING MODE END

■ Code Entry Method, and Cashier Key Method Case 2

0 ⟶ **[LOG/RECEIPT]** (or **[LOG]**) ..... A training-OFF receipt is issued in both cases.

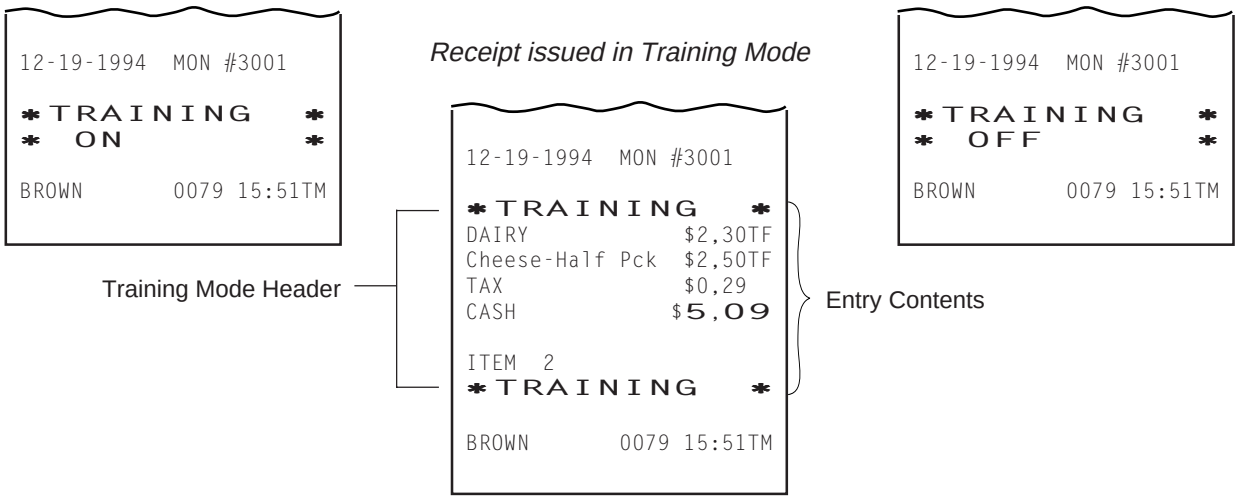
■ Cashier Key Method Case 1

Change from the current Cashier Key to another Cashier Key.

Now the register is in a Signed-OFF condition.You may turn the Mode Lock to any position for its corresponding operations. To start sale entries, a Cashier Key to ON status or a cashier's sign-ON status is again necessary.

-- Training Mode Receipt Format --

Training Start (Training Sign-ON) Receipt ——→ *Training End (Training Sign-OFF) Receipt*



8. KEYBOARD LAYOUT

The following are typical keyboard layouts for the MA-1650 series. Since this series is designed to be capable of programming most of the keys to be placed in the desired place on the keyboard, these are merely examples. The keyboard of your register should have its own layout according to the store's requirements.

-- Ordinary Keyboard Type (US Standard) --

Department Keys
(Department Preset-code Keys)

LOG RECEIPT	HOLD RECALL	#	RF	JF	1	6	11	16	21	26	VALI DATE	NS
SALES PERSON	SI/M	C		TX/M	2	7	12	17	22	27	CARD No.	ALL VOID
LC OPEN	FS/M	7	8	9	3	8	13	18	23	28	VND CPN	DOLL DISC
RTN MDSE	@/FOR	4	5	6	4	9	14	19	24	29	STR CPN	%-
VOID	AMT	1	2	3	5	10	15	20	25	30	SI/TL	EX
ITEM CORR	PLU	0	00	•	ST	TXBL TL	AT/TL		CHK TND	Chg	FSTL TEND	MISC

Other keys not placed in the keyboard above:

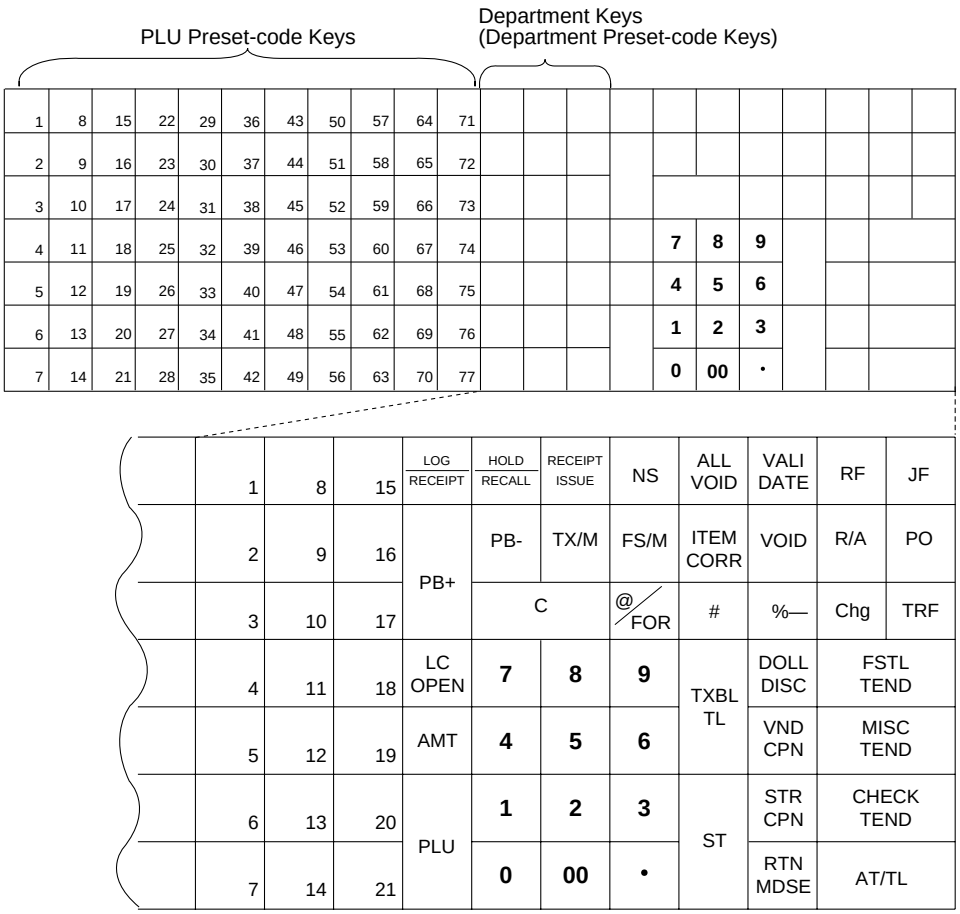
Additional Department Keys (31 to 60)

[000] (Triple-zero Key)
[BTL RTN]
[%+]
[CREDIT 1], **[CREDIT 2]**
[R/A]
[PO]
[NS]
[PR OPEN]
[OPEN]
[READ]
[RECEIPT ISSUE]
PLU Preset-code Keys
[TX2/M] to **[TX4/M]**
[TAX]
[PICK UP BAL] (or **[PB+]**)
[CODE OPEN] (or **[PB-]**)

[TRF]
[SI2/M], **[SI2/TL]**
[RPT]
[SCALE]
[TARE]
[GST/M]
[CUR 1] to **[CUR 5]**
[RECEIPT]
[LOG]
[CARD CHK]
[CHECK No.]
[DP#]
[CLK 1] to **[CLK 8]**
[FUNCTION 1] to
[FUNCTION 10]
[PLU ADD]

[TARE 2]
[TARE 3]
[COMMENT]
[DISPLAY1] to **[DISPLAY6]** for the EBT (Electronic Benefit Transfer) Spec.
[3rd PRICE]
[PACK]
[ID]
[DEBIT], **[EBT CASH]**, **[EBT F/S]**, **[MANUAL CARD#]**, **[OFFLINE AUTH]**, **[STORE RECEIPT]** for the EFT (Electronic Fund Transfer) Spec.

-- Flat Keyboard Type (US Standard) --



Other keys not placed in the keyboard above:

Additional Department Keys (22 to 60)

[000] (Triple-zero Key)
[BTL RTN]
[%+]
[PR OPEN]
[OPEN]
[TX2/M] to **[TX4/M]**
[TAX], **[EX]**
[PICK UP BAL]
[CODE OPEN]
[SI 1/M], **[SI 1/TL]**
[SI 2/M], **[SI 2/TL]**
[RPT]
[SCALE]
[TARE]

[CARD No.]
[GST/M]
[CUR 1] to **[CUR 5]**
[LOG]
[CHECK No.]
[CARD CHK]
[DP#]
[CREDIT 1], **[CREDIT 2]**
[FUNCTION 1] to
[FUNCTION 10]
[READ]
[TARE 2]
[TARE 3]
[COMMENT]

[DISPLAY1] to **[DISPLAY6]** for the EBT (Electronic Benefit Transfer) Spec.
[3rd PRICE]
[PACK]
[ID]
[DEBIT]
[EBT CASH]
[EBT F/S]
[MANUAL CARD#]
[OFFLINE AUTH]
[STORE RECEIPT]
} for the EFT (Electronic Fund Transfer) Spec.

9. FUNCTIONS OF EACH KEY

This section briefly describes functions of each key for your quick reference purposes. See the reference pages in Section 10: REGISTERING PROCEDURE AND PRINT FORMAT for detail operation sequences.

TABLE OF KEY FUNCTIONS

KEY	FUNCTIONS	REFERENCE PAGE
LOG	***LOG key.*** Used in case of Cashier Code Entry Method, to declare start or end of normal operation by cashier. For details, refer to Section 7.1.	7-1
RECEIPT	***Receipt key.*** Used to change the receipt-ON/OFF mode.	10-3
LOG / RECEIPT	***Log/Receipt key.*** This is a dual-function key that has both **[LOG]** and **[RECEIPT]** functions.	See pages for **[LOG]** and **[RECEIPT]**
RECEIPT / ISSUE	***Receipt Post-issue key.*** Used to issue the receipt of a sale when the sale has already finalized in the Receipt-OFF mode.	10-41
RF	***Receipt Feed key.*** Used to advance the receipt roll and operatedby holding it down until the paper has advanced to the required position.	-----
JF	***Journal Feed key.*** Used to advance the journal roll in the same fashion as the **[RF]** key is used to receipt roll.	-----
7 8 9 / 4 5 6 / 1 2 3 / 0 00 •	***Numeric keys.*** Used to enter numeric values. Depressing the **[00]** key once is the same as depressing the **[0]** key twice consecutively. Depressing the **[000]** key once is the same as depressing the **[0]** key three times consecutively. The **[.]** key is used to designate the decimal point of a percentage rate or a quantity.	-----
1 to **60**	***Department keys.*** Used to enter each item, serving for classifying merchandise by department.	10-5
DP#	***Department No. key.*** Used to access a department by designating the department code, instead of depressing the specific Department key. With this key installed, a maximum of 99 departments may be controlled.	See pages for **[DEPT]**
PLU	***PLU (Price-Look-Up) key.*** Used to enter a PLU that is linked to a department.	10-6
C	***Clear key.*** Used to clear numeric entries or a declaration key entry.	-----
#	***Non-add Number Print key.*** Used to print a non-add number (such as Customer No., Credit Card No., etc.) on the receipt and journal for future reference.	10-21
NS	***No-sale key.*** Used to open the cash drawer without relating a sale, and also used to display the store message.	10-3, 4

KEY	FUNCTIONS	REFERENCE PAGE
AMT	***Amount key.*** Used to enter a manual amount of PLU item. And also used to enter an amount or price for an open department when the department is accessed by the **[DP#]** key.	10-5
PR OPEN	***Preset Open key.*** Used to release a preset-price department or PLU items for a manual price entry.	10-5
LC OPEN	***Listing Capacity Open key.*** Used to release the high or low amount limit preprogrammed on each department or PLU.	10-23
OPEN	***Preset and Listing Capacity Open key.*** This is a dual-function key that has both **[PR OPEN]** and **[LC OPEN]** functions.	See pages for **[PR OPEN]** and **[LC OPEN]**.
@/FOR	***AT-FOR (Quantity Extension and Split Package Pricing) key.*** Used to multiply a department, PLU, or Bottle Return item entry by a quantity. Also used to auto-calculate and enter a split-package price, triple multiplication, or HI-CONE.	10-8
VND CPN	***Vendor Coupon key.*** Used to enter the amount of vendor coupons received from the customer.	10-20
STR CPN	***Store Coupon key.*** Used to subtract a store coupon amount redeemed through a department.	10-19
READ	***PLU Price-Read Key.*** Used to read the preset price of the designated PLU from the memory. Also used to read the amount and the name of the customer file.	10-25
COMMENT	***Comment Print key.*** Used to print the respective programmed comments on the receipt.	10-48
RTN MDSE	***Returned Merchandise key.*** Used to refund money to a customer who has returned items already purchased.	10-18
BTL RTN	***Bottle Return key.*** Used to enter a bottle return amount.	10-18
DOLL DISC	***Dollar Discount key.*** Used to subtract an amount from the sale such as a discount during a sale.	10-19
%+	***Percent Charge key.*** Used to add a percent rate to a sale.	10-19
%-	***Percent Discount key.*** Used to subtract a percent rate from a sale.	10-19
ITEM CORR	***Item Correct key.*** Used to remove the last item from the bill, printing a line through the item on the receipt and journal.	10-20
VOID	***Void key.*** Used to delete an item entered previously (before the last item) in the current transaction.	10-20

KEY	FUNCTIONS	REFERENCE PAGE
ALL VOID	***All Void key.*** Used to cancel all the items entered in the current sale.	10-21
R/A	***Received-on-Account key.*** Used to enter payments received on account, i.e. not relating to a sale. Also used for change reserve amounts loaned from the store.	10-4, 38
PO	***Paid-Out key.*** Used to record amounts paid out of the cash drawer not relating to a sale. Also used for Pick Up operations, such as money collections for banking purposes.	10-38, 3-1 (MG)
ST	***Subtotal key.*** Used to obtain subtotal of the current transaction.	10-24
TXBL TL	***Taxable Total key.*** Used to obtain the taxable total (the sale total including taxes due) of the current transaction.	10-24
DISPLAY 1 to **DISPLAY 5**	***Message Display Keys 1 to 5.*** (Applicable only to the EBT (Electronic Benefit Transfer) Spec.) Used to automatically settle an account of a sale using EBT card and credit card, etc. during the EBT entry.	10-29
DISPLAY 6	***Message Display key 6.*** (Applicable only to the EBT (Electronic Benefit Transfer) Spec.) Used to issue the second receipt (store copy) during the EBT entry.	10-29
AT/TL	***Cash Amount Tendered/Cash Total key.*** Used to record all cash paid transactions, and will be able to finalize a sale operation.	10-27
CHK TND or **CHECK TEND**	***Check key.*** This is one of non-cash media keys, and used to cash a check when the register is outside a sale, or to finalize the transaction as a check payment.	10-27
Chg	***Charge key.*** This is another non-cash media key, and usually programmed as “Charge Sale Total” key. This key can also be used for payments in credit cards, if the **[CARD No.]** key is installed.	See pages for **[CHECK TEND]**
MISC or **MISC TEND**	***Miscellaneous Media Key.*** This is one of additional non-cash media keys that may be installed besides **[CHK TND]** and **[Chg]**. This key has the same functions and programmabilities as the **[CHK TND]** key, and usually used as Tender-only key.	See pages for **[CHECK TEND]**
CREDIT 1 **CREDIT 5**	***Credit 1 & 2 keys.*** These are additional non-cash media keys that may be installed besides those already described, according to the requirements of each store.	See pages for **[CHECK TEND]**
CARD No.	***Card No. key.*** Used to enter the code number (1 to 12) which classifies the credit card company followed by the sale finalization with the **[Chg]** key.	10-27
VALI DATE	***Validation key.*** Used to print a required item or finalizing a required sale on a validation slip.	10-46
CHECK No.	***Check No. and Endorsement Print key.*** Used to print the endorsement data with or without a Check No. print after finalizing a sale with a non-cash media key.	10-47
PB+ or **PB-**	***Previous Balance keys.*** Used to enter a previous balance in a charge posting operation.	10-42

KEY	FUNCTIONS	REFERENCE PAGE
TRF	***Transfer key.*** Used to transfer the entire balance in a charge posting operation with no payment.	10-42
PICK UP BAL	***Pick Up Balance key.*** This key should be installed in place of the **[PB+]** key if the "Customer File" (Check Track) memory option is selected instead of the "Manual PB Entry" type.	10-44
CODE OPEN	***Customer File Code Open key.*** This key should be installed in place of the **[PB-]** key if the "Customer File" memory option is selected.	10-44
SI/TL or: **SI1/TL** **SI2/TL**	***SI (Selective Itemizer) Total key.*** Used to display (and print) the selective itemizer contents.	10-25
SI/M or: **SI1/M** **SI2/M**	***SI (Selective Itemizer) Modifier key.*** Used to reverse the SI (Selective Itemizer) status programmed on each Department or PLU.	10-23
TX/M or: **TX1/M** to **TX4/M**	***Tax Modifier key(s).*** Used to reverse the taxable/non-taxable status on departments, PLUs, or other tax-status programmable keys. Also used in Tax Exempt operations.	10-24, 26
EX	***Tax Exempt key.*** Used to declare the exemption of the taxes from the sale.	10-26
SALES PERSON	***Salesperson key.*** Used to record sales contribution data of each salesperson for report purpose.	10-39
RPT	***Repeat key.*** Used to repeat a department or PLU item entry.	10-7
CUR 1 to **CUR 5**	***Foreign Currency keys.*** Used in tendering or exchange with foreign currencies.	10-36
SCALE	***Scale key.*** This key is used for various scaled items. To enable to register weight data from the scale, only the Departments programmed with the Scale-Allowed status or the PLUs programmed with the Scale-Compulsory status may be operated.	10-22
TARE	***Tare key.*** Used to enter the preset tare weight data prior to a scaled item entry, thus to subtract tare from the gross weight and obtain the net weight.	10-22
TARE 2	***Tare 2 key.*** Used to calculate the net weight using the % rate set in the PLU table or the input rate when the scaled item (for Department, PLU) is entered.	10-22
TARE 3	***Tare 3 key.*** Used to enter the tare weight manually when the scaled item (for Department, PLU) is entered.	10-22

KEY	FUNCTIONS	REFERENCE PAGE
TAX	***Manual Tax key.*** Used to enter an irregular tax amount that cannot be calculated on the basis of the programmed tax table, and to add it to the sale total.	10-24
FSTL TEND	***Food Stamp Total Read / Tender key.*** Used to read the Food Stampable portion amount of the sale and to tender an amount in Food Stamps.	10-26
FS/M	***Food Stamp Modifier key.*** Used to reverse the Food Stampable/Non-stampable status of a Department, PLU, and other function keys programmable with food-stampable status.	10-24
GST/M	***GST Modifier key.*** Used to reverse the GST taxable/Non-taxable status of a Department, PLU, and other function keys programmable with GST tax status.	10-24, 26
CARD CHK	***Card Check key.*** Used to enter the Card No. of the credit card to check if the card is acceptable.	10-40
CLK 1 to **CLK 8**	***Cashier 1 to Cashier 8 keys.*** Used to declare start or end of normal operation by cashier (instead of using **[LOG/RECEIPT]** (or **[LOG]**) key).	7-4
FUNCTION 1 to **FUNCTION 10**	***Function 1 to Function 10 keys.*** Used to execute a command of key string preprogrammed on each of these keys. An operation series of maximum 10 keys can be programmed on each key, thus eliminating time in daily operation routines.	10-46
HOLD / RECALL	***HOLD/RECALL key.*** In case a customer is slow in payment or in endorsement of a check at finalizing the sale, this key is used to “hold” the sale by temporarily finalizing the sale, and after wards to “recall” the sale total of the customer to really finalize it. When the sale is “recalled,” additional sale items may be entered before the real finalization.	10-39
PLU ADD	***PLU Add key.*** Used to add a PLU item that has not been programmed in the PLU table file, to the PLU Additional Table file.	10-17
3rd PRICE	***PLU 3rd Price key.*** Used to perform the dollar discount or the extra charge for a packed sales item.	10-14
PACK	***Pack key.*** Used to enter a packed sales item.	10-13
ID	**ID key.** Used to enter a sales item of cigarette or alcoholic beverage.	10-6
DEBIT	***Debit key.*** This is one of the EFT media keys.	10-30
EBT CASH	***EBT Cash key.*** This is one of the EFT media keys.	10-30
EBT F/S	***EBT Food Stamp key.*** This is one of the EFT media key.	10-30
MANUAL CARD #	***Manual Card No. key.*** Used to manually enter a card No. and its expiration date on the ECR.	10-34

KEY	FUNCTIONS	REFERENCE PAGE
OFFLINE AUTH	***Off-line Authority key.*** Used to finalize the EFT sale transaction on the ECR.	10-35
STORE RECEIPT	***Store Receipt key.*** Used to manually issue a store receipt.	10-35
PLU Preset-code Keys	Each of these keys is programmed with a PLU Code. That is, depressing one of those keys is equal to entering a PLU Code then depressing the **[PLU]** key.	See pages for **[PLU]**

NOTE: *To perform the operations regarding the EFT (Electronic Fund Transfer), the hardware devise to connect the EFT terminal and the software setup to realize the EFT function are required. For details, ask your TOSHIBA TEC representative.*

10. REGISTERING PROCEDURE AND PRINT FORMAT

Before starting sale entries, read through the following instructions:

TRAINING MODE is available:

If you are a beginner in operating this register, ask the store manager for practicing in the TRAINING MODE.

During your operations, the following may occur:

- Errors ...
  A tone continuously sounds and an error message appear in the upper row of the Operator Display panel. The keys on the keyboard are locked. In this case, read the Error Message (refer to the ERROR MESSAGE TABLE, Section 5.1), and depress the **[C]** key to cancel the error status. Then remove the cause of the error and perform the operation again.

- Manager Intervention is required ...
  When Error Message “MANAGER REQUIRED” (standard setting; programmable) is displayed, it means that the last key or operation requires a Manager Intervention. Depress the **[C]** key to cancel the error status, and call the manager for intervention.

  When the manager comes to intervene with an appropriate key, you may perform the operation again. If you are informed which keys and operations will require Manager Intervention, you can call the manager in advance before the error occurs.

- Other errors requiring Manager Intervention ...
  When an error occurs and you cannot think of the cause or the same error occurs again, call your manager.

- Receipt or Journal Paper-End is detected ...
  When an error tone sounds (without an error message) and the “AMOUNT” portion of the display is flickering, the receipt or journal roll is about to end. In this case, the error cannot be canceled by the **[C]** key. Replace the paper roll with a new one, referring to the paper installing/removing operations in Chapter 15 and Chapter 6.

- Printer Motor-Lock Condition is detected ...
  If “Error” is indicated in the lower row of the display panel (“AMOUNT” portion), the Printer Motor is locked due to paper jam, etc. Turn the Power Switch to OFF, and remove the cause of the motor-lock. Refer to Chapters 12 and 13.

CONDITION SETTING TO START TRANSACTION ENTRIES

Mode Lock: Insert the “REG” key and set it to the “REG” position.

Cashier Sign-ON or Cashier Key to ON status:

If the **[LOG/RECEIPT]** (or **[LOG]**) key is installed, you must sign-ON or sign-IN. (See Section 7.1.)
If Cashier Keys or Cashier Locks are installed, you must set your cashier key to the ON status. (See Section 7.2. and 7.3.)

Now you are ready for sale entries.

On the following pages are patterns of entering operations, and receipt or journal print format samples due to the operations. In the operation sequence patterns, “|_____|” indicates an input through the numeric keys, “**[ ]**” indicates a depression of the function key, and “---” indicates other registering and/or finalizing operations.

Please note that these are merely sample operations. Especially, the receipt or journal print indications merely show the standard print format. The actual print format and contents may vary on your machine in accordance with the differences in specifications, program selections, etc.

WARNING!
When opening the cash drawer, be careful not to let the drawer hit any person.

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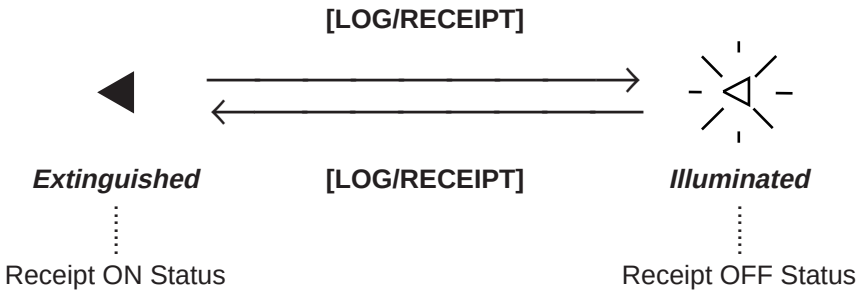
10.1 RECEIPT-ISSUE/NON-ISSUE SELECTION

Receipts are issued or not issued according to the “R OFF” lamp illuminated/extinguished status on the Operator Display panel.

“R OFF” (Receipt OFF) **Lamp Status Change Operations** (**[LOG/RECEIPT]** = **[RECEIPT]**).
Mode Lock may be in any position



NOTES:
1. *The “R OFF” lamp status at the starting of a transaction entry decides whether a receipt will be issued for the transaction or not. Switching the Receipt ON/OFF status during a transaction will not be effective.*
2. *If a transaction entered with the “R OFF” lamp illuminated and finalized but a receipt is required, the **[RECEIPT ISSUE]** (Post-issue Receipt) key can be operated to issue a receipt.*
3. *Simply depress the **[LOG/RECEIPT]** key without a numeric entry. If the key is depressed with a prior numeric entry in REG mode, it may turn out to be a Sign ON or Sign OFF operation (in case of Cashier Code Entry Method).*

10.2 STORE MESSAGE DISPLAY

This operation designates one of the four messages programmed to display in REG or MGR mode when no entries are under way on the register.

OPERATION (must be operated outside a sale)

|Display Message Code| **[NS]**
1 to 4
(corresponding to Line No.1 to 4 in programming)

NOTE: *This operation is effective when program options “Display Message Method 16 CHARACTERS HELD” and “Display Message DISPLAY in REG and MGR mode (as well as in LOCK mode)” are both selected. Display selection in LOCK mode also depends on the line designated in this operation.*

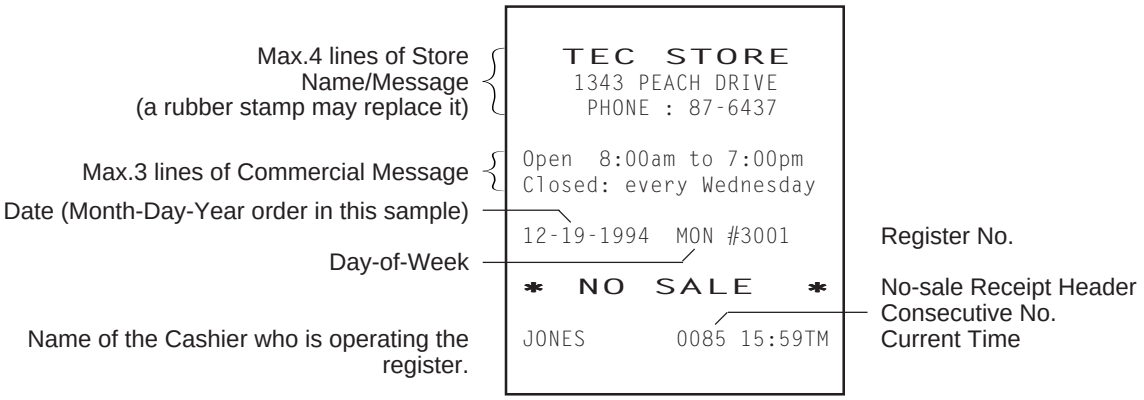
10.3 NO-SALE

The no-sale transaction is used to open the cash drawer without relating to any sales, such as for giving change, testing the receipt/journal print condition, etc.

OPERATION (must be operated outside a sale)

[NS] ..... The drawer opens and a No-sale receipt is issued.

-- Receipt Print Format --

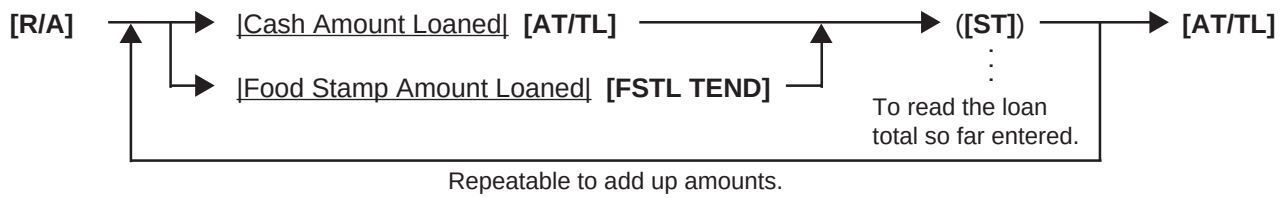


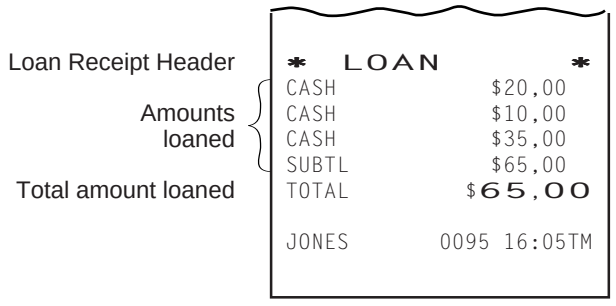
NOTE: *The print format samples in this manual are not copies of actual receipts printed on an ECR but are merely indications of print formats. In those format samples, the bold-face characters indicate Double-sized Characters on actual receipts issued by the ECR. Also note that each Double-sized Character on actual receipts will be printed at the position half-character space rightward more than in the print format samples in this manual.*

10.4 LOAN

This operation is used to record the cash amounts and food stamps loaned from the store as the change reserve in the drawer.

OPERATION (must be operated outside a sale)





10.5 DEPARTMENT ENTRY

Each department is preprogrammed as the “PRESET” type (with a price programmed) or “OPEN” type (with no price programmed). Perform operation depending on the type selected.

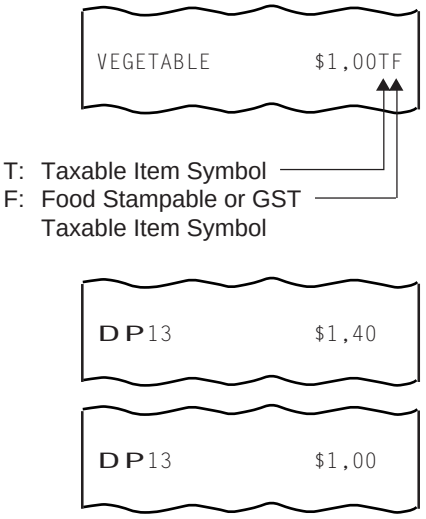
OPERATION

Open Department Type
- |Price| **[Open DEPT]**
- |Open-Dept Code| **[DP#]** |Price| **[AMT]**

Preset Department Type
- **[Preset DEPT]**
- |Dept Code| **[DP#]**

Preset-price Open through Preset Department Type
- **[PR OPEN]** (or **[OPEN]**) |Price| **[Preset DEPT]**
- **[PR OPEN]** (or **[OPEN]**) |Dept Code| **[DP#]** |Price| **[AMT]**

-- Receipt Print Format --



10.6 GASOLINE ENTRY

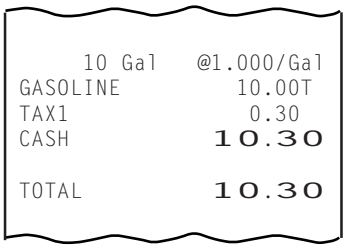
Enter the sale amount of gasoline. The quantity of gasoline is calculated by the preset gallon unit price.

OPERATION

Same as Open Department Type of DEPARTMENT ENTRY sequence using the Department Key which is programmed as a Gasoline Sales department.

NOTES:
1. *The **[DP#]** key cannot be used for Gasoline entries.*
2. *The calculation result (the quantity of gasoline) will be obtained down to the 3rd digit below the decimal point. The fraction rounding method is ruled by the option selected for the Quantity Extension fraction rounding. (see NOTE 5 attached to QUANTITY EXTENSION section).*
3. *The repeat entry is unavailable to a Gasoline Sales department.*

-- Receipt Print Format --



10.7 PLU ENTRY (Manual PLU Code Entry)

Each PLU is preprogrammed as the “PRESET” type (with a price preset) or “OPEN” type (with no price preset). Perform operation depending on the type selected.

OPERATION

Open PLU Type
- |Open-PLU Code| **[PLU]** |Price| **[AMT]**
- |Price| **[PLU Preset-Code Key]** of Preset-PLU

Preset PLU Type
- |Preset-PLU Code| **[PLU]**
- **[PLU Preset-Code Key]** of Preset-PLU

Preset-price Open Entry through Preset PLU Type
- **[PR OPEN]** (or **[OPEN]**) |Preset-PLU Code| **[PLU]** → |Price| **[AMT]**
- **[PR OPEN]** (or **[OPEN]**) |Price| **[PLU Preset-Code Key]**

-- Receipt Print Format --

10.8 PLU ENTRY through Barcode Scanner

OPERATION

Basic Operation Sequence:

Scan the barcode of the required item (instead of |PLU Code| **[PLU]**)

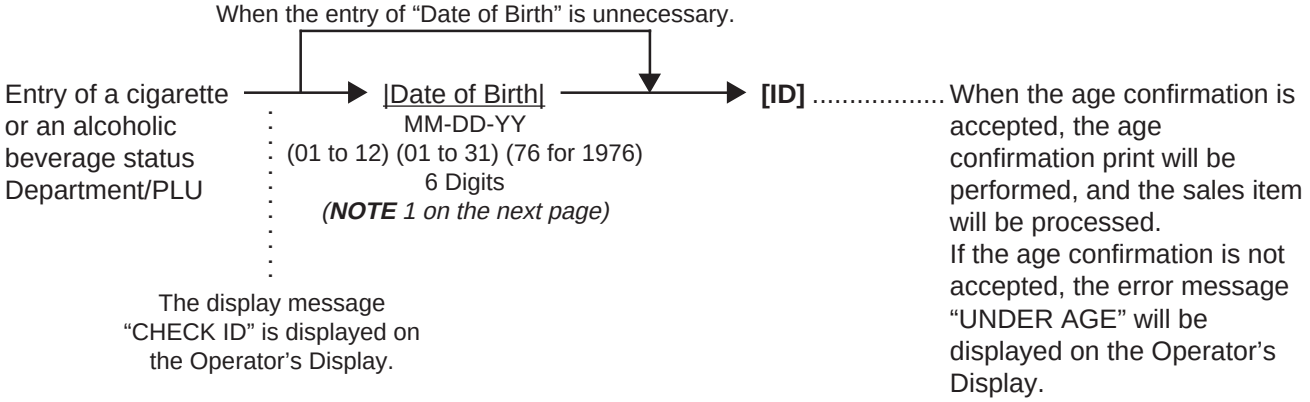
... A short tone is generated when the barcode is successfully scanned.

*When the Interface board for the scanner is installed to the ECR and a barcode scanner is connected, the operation sequence “|PLU Code| **[PLU]**” can be replaced by simply scanning the barcode. It is true in any operation pattern relating to PLU entries (Repeat, Quantity Extension, etc.).*

10.9 CIGARETTE AND ALCOHOLIC BEVERAGE ENTRY (ENTRY OF SALES ITEM RESTRICTED BY AGE LIMIT)

This operation checks whether or not a customer satisfies the age limit to purchase cigarette and alcoholic beverage.

OPERATION



NOTES:
1. *When the month of date of birth is January to September, the entry of the preceding zero can be omitted.*
2. *Initial setting is as follows.*
   - *Customer of the age 18 or more can purchase cigarette.*
   - *Customer of the age 21 or more can purchase alcoholic beverage.*
3. *In one sale transaction, the entry of date of birth and the **[ID]** key depression can be performed only once. The age confirmation will be automatically performed in the second or later entry of cigarette or alcoholic beverage.*
4. *Entry of the date of birth can be programmed to be compulsory.*
5. *In the entry of cigarette or alcoholic beverage after the Recall Operation, it is unnecessary to enter the date of birth and depress the **[ID]** key if the age confirmation has been performed before the Hold Operation.*

-- Receipt Print Format --

```
ID CHECK   03/24/76
```

Age Confirmation

10.10 REPEAT ENTRY

To repeat the same item of the last entry, simply depress the last key of the department or PLU entry sequence or depress the **[RPT]** key.

OPERATION

(1) Department Repeat

Open Department Type
- |Price| **[Open DEPT]** **[Same DEPT]** (or **[RPT]**)
- |Open-Dept Code| **[DP#]** |Price| **[AMT]** **[AMT]** (or **[RPT]**)

Preset Department Type
- **[Preset DEPT]** **[Same DEPT]** (or **[RPT]**)
- |Preset-Dept Code| **[DP#]** **[DP#]** (or **[RPT]**)

Preset-price Open Repeat
- **[PR OPEN]** (or **[OPEN]**) |Price| **[Preset DEPT]** **[RPT]**
- **[PR OPEN]** (or **[OPEN]**) |Preset-Dept Code| **[DP#]** |Price| **[AMT]** **[RPT]**

-- Receipt Print Format --

```
VEGETABLE          $1,20TF
VEGETABLE          $1,20TF
```

(2) PLU Repeat

Open PLU Type
- |Open-PLU Code| **[PLU]** |Price| **[AMT]** **[AMT]** (or **[RPT]**)
- |Price| **[PLU Preset-Code Key]** **[Same key]** (or **[RPT]**)

-- Receipt Print Format --

```
Hard Rolls-4       $0,70TF
Hard Rolls-4       $0,70TF
```

NOTES:
1. *If the first item of those repeated is modified with **[SI/M]**, **[LC OPEN]**, **[FS/M]**, **[GST/M]** or **[TX/M]**, the modified status will be effective through the last item of the repeated.*
2. *Please note that the Preset-price Open Repeat using a **[Preset DEPT]** key or a **[PLU Preset-Code Key]** can only be repeated by the **[RPT]** key.*
3. *A negative Department or negative PLU item cannot be repeated. Neither can any Other Income Department/PLU be repeated.*

10.11 QUANTITY EXTENSION (MULTIPLICATION) FOR DEPTs/PLUs

OPERATION

(1) Department Multiplication

Open Department Type

- |Quantity| **[@/FOR]** |Price| **[Open DEPT]**
- |Quantity| **[@/FOR]** |Open-Dept Code| **[DP#]** |Price| **[AMT]**

Preset Department Type

- |Quantity| **[@/FOR]** **[Preset DEPT]**
- |Quantity| **[@/FOR]** |Preset-Dept Code| **[DP#]**

Preset-price Open Type

- |Quantity| **[@/FOR]** **[PR OPEN]** (or **[OPEN]**) |Price| **[Preset DEPT]**
- |Quantity| **[@/FOR]** **[PR OPEN]** (or **[OPEN]**) |Preset-Dept Code| **[DP#]** |Price| **[AMT]**

(2) PLU Multiplication

Open PLU Type

- |Open-PLU Code| **[PLU]** |Quantity| **[@/FOR]** |Price| **[AMT]**
- |Quantity| **[@/FOR]** |Price| **[PLU Preset-Code Key]** of Open-PLU

Preset PLU Type

- |Quantity| **[@/FOR]** |Preset-PLU Code| **[PLU]**
- |Quantity| **[@/FOR]** **[PLU Preset-Code Key]** of Preset-PLU

-- Receipt Print Format --

```
      5x1,30@
DAIRY              $6,50TF
      6x0,45@
BAKERY             $2,70TF
```

Preset-price Open Type

- **[PR OPEN]** (or **[OPEN]**) |Preset-PLU Code| **[PLU]** |Quantity| **[@/FOR]** |Price| **[AMT]**
- |Quantity| **[@/FOR]** **[PR OPEN]** (or **[OPEN]**) |Price| **[PLU Preset-Code Key]** of Preset-PLU

NOTES:

1. *Quantity ..... Max. 3 integral + 3 decimal digits (Use the **[.]** key for entering decimal digits.)*
   Price (Unit Price) ..... Max. 6 digits (or 5 digits with Preset Point feature)
   Product ..... Must not exceed 8 digits.
2. *When the Quantity is 1-digit integer (1 to 9) followed by a Code-preset Department/PLU key with a price preset, the **[@/FOR]** key is omissible.*
3. *The product obtained by multiplication cannot be repeated.*
4. *The decimal portion of the Quantity entry itself is processed down to the two digits below the decimal point. The fraction rounding in this case is fixed to ROUND OFF.*
5. *You can select the rounding process of the fractions of the product (result of multiplication) by a program option: ROUND OFF (initial setting), ROUND UP, or ROUND DOWN.*
6. *For the CA version, non-taxable quantity can be programmed. When a quantity of a taxable sale item reaches the programmed non-taxable quantity by the Quantity Extension, a sale of the item will be non-taxable.*

10.12 SPLIT PACKAGE PRICING ("Q'ty" = Quantity ... in the patterns listed below)

OPERATION

(1) Department

Open Department

- |Purchased Q'ty| **[@/FOR]** |Whole Package Q'ty| **[@/FOR]** →
  - → |Whole Package Price| **[Open Dept]**
  - → |Open-Dept Code| **[DP#]** |Whole Package Price| **[AMT]**

Preset Department

- |Purchased Q'ty| **[@/FOR]** |Whole Package Q'ty| **[@/FOR]**
  - **[Preset Dept]**
  - |Preset-Dept Code| **[DP#]**

Preset-price Open

- **[PR OPEN]** (or **[OPEN]**) → |Purchased Q'ty| **[@/FOR]** |Whole Package Q'ty| **[@/FOR]**
  - |Whole Package Price| **[Preset Dept]**
  - |Preset-Dept Code| **[DP#]** |Whole Package Price| **[AMT]**

(2) PLU

Open PLU

- |Purchased Q'ty| **[@/FOR]** (***NOTE** 1 below*)
  - |Split-Price Type PLU Code| **[PLU]** of open-price PLU
    - |Whole Package Price| **[AMT]**
  - |Whole Package Price| **[PLU Preset-code Key]** of open-price PLU and Split-Price Type

Preset PLU

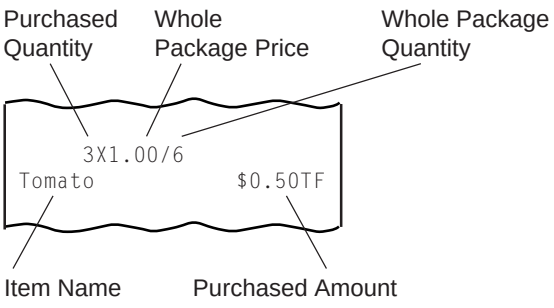
- |Purchased Q'ty| **[@/FOR]** (***NOTE** 1 below*)
  - |Split-Price Type PLU Code| **[PLU]** of preset-price PLU
  - **[PLU Preset-code Key]** of preset-price PLU and Split-Price Type

Preset-Price Open

- **[PR OPEN]** (or **[OPEN]**)
- |Purchased Q'ty| **[@/FOR]** (***NOTE** 1 below*)
  - |Split-Price Type PLU Code| **[PLU]** of preset-price PLU
    - |Whole Package Price| **[AMT]**
  - |Whole Package Price| **[PLU Preset-code Key]** of preset-price PLU and Split-Price Type

NOTES:

1. *When this portion is omitted, the "Purchased Q'ty" value is regarded as "1" (i.e. one individual item but not the whole package quantity.)*
2. *Purchased Quantity ..... max.3 digits integral only*
   Whole Package Quantity ..... max.3 digits integral only
   Whole Package Price ..... max.6 digits
3. *This operation is possible only when the option "Split Package Pricing" is selected (instead of Triple Multiplication).*
4. *One of two fraction rounding methods can be selected for the Split Package Pricing calculations --- Round Up PRODUCT (initial setting) or Round Up UNIT PRICE.*



10.13 HI-CONE PLUs

In addition to ordinary Split-Price PLUs, the HI-CONE status can be programmed to each of them.
If so programmed, the operation patterns for one item entry (entry of one individual split-package item) and for the whole package quantity entry are different from those of ordinary Split-Price PLUs.

To enter one individual item in the package (one unpacked item):

Ordinary Split-Price PLUs (i.e. without HI-CONE status)

Open PLU
(1 **[@/FOR]**)
Entry of Quantity 1 can be omitted.
→ |Split-Price Type PLU Code| **[PLU]** of open-price PLU
→ |Whole Package Price| **[AMT]**
→ |Whole Package Price| **[PLU Preset-code Key]** of open-price PLU and Split-Price Type

Preset PLU
(1 **[@/FOR]**)
Entry of Quantity 1 can be omitted.
→ |Split-Price Type PLU Code| **[PLU]** of preset-price PLU
→ **[PLU Preset-code Key]** of preset-price PLU and Split-Price Type

HI-CONE PLUs

Open PLU
1 **[@/FOR]**
Entry of Quantity 1 is required.
→ |Split-Price Type PLU Code| **[PLU]** of open-price PLU and Split-Price Type
→ |Whole Package Price| **[AMT]**
→ |Whole Package Price| **[PLU Preset-code Key]** of open-price PLU and Split-Price Type and HI-CONE status

Preset PLU
1 **[@/FOR]**
Entry of Quantity 1 is required.
→ |Split-Price Type PLU Code| **[PLU]** of preset-price PLU and HI-CONE status
→ **[PLU Preset-code Key]** of preset-price PLU and Split-Price Type and HI-CONE status

To enter Whole Package Quantity (all the items packed):

Ordinary Split-Price PLUs (i.e. without HI-CONE status)

Open PLU
• |Whole Package Q'ty| **[@/FOR]** Cannot be omitted
→ |Split-Price Type PLU Code| **[PLU]** of open-price PLU
→ |Whole Package Price| **[AMT]**
→ |Whole Package Price| **[PLU Preset-code Key]** of open-price PLU and Split-Price Type

Preset PLU

- |Whole Package Q'ty| **[@/FOR]** → |Split-Price Type PLU Code| **[PLU]** of preset-price PLU
  Cannot be omitted
  → **[PLU Preset-code Key]** of preset-price PLU and Split-Price Type

HI-CONE PLUs

Open PLU

|Split-Price Type PLU Code| **[PLU]** → |Whole Package Price| **[AMT]**
of open-price PLU and HI-CONE status

|Whole Package Price| **[PLU Preset-code Key]**
of open-price PLU and Split-Price Type and HI-CONE status

Preset PLU

|Split-Price Type PLU Code| **[PLU]**
of preset-price PLU and HI-CONE status

[PLU Preset-code Key]
of preset-price PLU and Split-Price Type and HI-CONE status

Thus the "Whole Package Quantity" entry is not necessary for a sale of the Whole Package Quantity of a Split-Price PLU of HI-CONE status.

NOTE: *The Unit Price of Individual Split-package Item can be preset for each HI-CONE PLU. If it is preset, Split Pricing entry of such a PLU (with less than the Whole Package Quantity) will be calculated on the basis of the preset price of Individual Split-package Item. If it is not preset, the calculation is performed on the basis of the Whole Package Price, just as ordinary Split-Price PLUs.*
Also see the NOTES attached to the section of SPLIT PACKAGE PRICING.

Operation Examples of HI-CONE PLUs

1) When PLU No. 1 is programmed with Whole Package Price of $1.00, Whole Package of Quantity 3, and HI-CONE status. The Split-package Individual Item Price is not preset.

Entry Contents	*Key Operation*	*Sale Amount (Calculation Process)*
Quantity 1:	1 **[@/FOR]** 1 **[PLU]**	$0.34 ($1.00 ÷ 3 = $0.333 ...)
Quantity 2:	2 **[@/FOR]** 1 **[PLU]**	$0.67 ($1.00 x 2/3 = $0.666 ...) *(NOTE)*
Quantity 3:	3 **[@/FOR]** 1 **[PLU]**	$1.00 (Preset Whole Package Price)
Whole Package: (= Quantity 3)	1 **[PLU]**	$1.00 (Preset Whole Package Price)

NOTE: *When the option "ROUND UP UNIT PRICE" is selected, the Sale Amount and the Calculation Process will be as follows:*
$0.68 ($1.00 ÷ 3 = 33.33 ... rounded up to $0.34 ... x 2)

2) Same as 1) above, except that the Split-package Individual Item Price is preset with $0.40.

Entry Contents	*Key Operation*	*Sale Amount (Calculation Process)*
Quantity 1:	1 **[@/FOR]** 1 **[PLU]**	$0.40 (Preset Indiv. Item Price)
Quantity 2:	2 **[@/FOR]** 1 **[PLU]**	$0.80 (Preset Indiv. Item Price x 2)
Quantity 3:	3 **[@/FOR]** 1 **[PLU]**	$1.00 (Preset Whole Package Price)
Whole Package: (= Quantity 3)	1 **[PLU]**	$1.00 (Preset Whole Package Price)

10.14 Mix & Match (M &M) Function of Split-Price PLUs

Each of Split-Price PLUs can be programmed with a M & M Group No. Even different PLUs of the same M & M Group No. can be entered mixedly within a sale, then an automatic discount is made when the specified number of those PLU items are entered. For example, if two different bottled drink items cost $1.00 for three bottles, those items can be programmed with the same M & M Group No. to enable Mix & Match sales. To set different PLUs into the same M & M Group, each of the PLUs must be set with the same Whole Package Quantity, same Whole Package Price, and same Split-package Individual Price (if it is set). Otherwise, a wrong calculation will occur in actual entries in a sale.

Operation Examples of Mix & Match Functions

Cases 1) Two PLUs (PLU No. 1 and PLU No. 2 are programmed with Whole Package Quantity of 3, Whole Package Price $1.00, and the same M & M Group No.:

1-1) When the PLUs are programmed as ordinary Split-Price PLUs (without HI-CONE):

Entry Contents (within one sale)	*Key Operation*	*Sale Amount (Calculation Process)*
1 x PLU No. 1	1 **[@/FOR]** 1 **[PLU]**	$0.34 ($1.00 ÷ 3 = $0.333 ...)
1 x PLU No. 2	1 **[@/FOR]** 2 **[PLU]**	$0.33 ($1.00 x 2/3 = $0.666 ... rounded up to $0.67 - $0.34) *(NOTE)*
1 x PLU No. 1	1 **[@/FOR]** 1 **[PLU]**	$0.33 ($1.00 - $0.67) *(NOTE)*
	Sale Total	$1.00

NOTE: *When the option "ROUND UP UNIT PRICE" is selected, the Sale Amounts on the second and third entries are as follows:*
$0.34 (instead of $0.33) (second entry)
$0.32 (instead of $0.33) (third entry)

1-2) When the PLUs are programmed with HI-CONE status and not programmed with Preset Individual Prices:

Entry Contents (within one sale)	*Key Operation*	*Sale Amount (Calculation Process)*
1 x PLU No. 1	1 **[@/FOR]** 1 **[PLU]**	$0.34 ($1.00 ÷ 3 = $0.333 ...)
1 x PLU No. 2	1 **[@/FOR]** 2 **[PLU]**	$0.33 ($1.00 x 2/3 = $0.666 ... rounded up to $0.67 - $0.34) *(NOTE)*
1 x PLU No. 1	1 **[@/FOR]** 1 **[PLU]**	$0.33 ($1.00 - $0.67) *(NOTE)*
	Sale Total	$1.00

NOTE: *Same as the NOTE in Case 1) above*

1-3) When the PLUs are programmed with HI-CONE status and programmed with Preset Individual Item Price of $0.40:

Entry Contents (within one sale)	*Key Operation*	*Sale Amount (Calculation Process)*
1 x PLU No. 1	(1 **[@/FOR]**) 1 **[PLU]**	$0.40 (Preset Indiv. Item Price)
1 x PLU No. 2	(1 **[@/FOR]**) 2 **[PLU]**	$0.40 (Preset Indiv. Item Price)
1 x PLU No. 1	(1 **[@/FOR]**) 1 **[PLU]**	$0.20 ($1.00 - $0.80)
	Sale Total	$1.00

Cases 2) Same as Case 1-3) except that the PLUs are not programmed with the same M &M Group

2-1) When Individual Items are entered separately:

Entry Contents (within one sale)	*Key Operation*	*Sale Amount (Calculation Process)*
PLU No. 1 (Whole package)	(3 **[@/FOR]**) 1 **[PLU]**	$1.00 (Whole Package Price)
PLU No. 2 (Whole package)	(3 **[@/FOR]**) 2 **[PLU]**	$1.00 (Whole Package Price)
Sale Total		$2.00

NOTE: *Even without M &M Grouping programmed, an entry of any Split-Price PLU in units of Whole Package Quantity is processed as Whole Package Price for each PLU.*

2-2) When the PLUs are entered in units of whole packages:

Entry Contents (within one sale)	*Key Operation*	*Sale Amount (Calculation Process)*
PLU No. 1 (Whole package)	(3 **[@/FOR]**) 1 **[PLU]**	$1.00 (Whole Package Price)
PLU No. 2 (Whole package)	(3 **[@/FOR]**) 2 **[PLU]**	$1.00 (Whole Package Price)
Sale Total		$2.00

NOTE: *Even without M &M Grouping programmed, an entry of any Split-Price PLU in units of Whole Package Quantity is processed as Whole Package Price for each PLU.*

10.15 PRICE SHIFT ENTRY for Split-Price PLUs

This operation performs Split-price PLU item entry using the following three unit price.
- Cooled one unpacked item
- Cooled packed item
- Packed item under normal temperature

OPERATION

1) For the entry of cooled packed item

[PACK] → Barcode Scanning
[PACK] → |PLU Code| **[PLU]**
[PACK] → **[PLU Preset-Code Key]** of Preset-PLU

NOTES:
1. *Depressing the **[PACK]** key after the **[3rd PRICE]** key is depressed results in an error.*
2. *This transaction can handle neither open price PLU nor scale-compulsory PLU.*
3. *Preset-price Open Entry is unavailable for this transaction.*
4. *This transaction is unavailable when the Triple Multiplication feature has been selected.*

2) For the entry of packed item under normal temperature

[3rd PRICE] ⟶ Barcode Scanning
[3rd PRICE] ⟶ |PLU Code| **[PLU]**
[3rd PRICE] ⟶ **[PLU Preset-Code Key]** of Preset-PLU

NOTES: *1. Depressing the **[3rd PRICE]** key after the **[PACK]** key is depressed results in an error.*
2. This transaction can handle neither open price PLU nor scale-compulsory PLU.
3. Preset-price Open Entry is unavailable for this transaction.
4. This transaction is unavailable when the Triple Multiplication feature has been selected.

Example)

Program Contents	• Whole Package Price: 100 • Whole Package Quantity: 3 • Split-package Individual Item Price: 40 • Quantity Entry Compulsory: None		• HI-CONE Status: None • Mix & Match Function: With • Amount of Dollar Discount/ Extra Charge: 20 (Discount)
Entry Contents	1 **[PLU]** 40 1 **[PLU]** 40 1 **[PLU]** 20 Total 100		..... Split-package Individual Item Price ..... Split-package Individual Item Price ..... Mix & Match 100 - 40 - 40 = 20
	1 **[@/FOR]** 1 **[PLU]** 40 2 **[@/FOR]** 1 **[PLU]** 60 3 **[@/FOR]** 1 **[PLU]** 100 Total 200		..... Split-package Individual Item Price ..... Mix & Match 100 - 40 = 60 ..... Mix & Match
	[PACK] 1 **[PLU]** 100 **[3rd PRICE]** 1 **[PLU]** 80 Total 180		..... Whole Package Price ..... Whole Package Price -Dollar Discount

Program Contents	• Whole Package Price: 100 • Whole Package Quantity: 3 • Split-package Individual Item Price: 40 • Quantity Entry Compulsory: With		• HI-CONE Status: None • Mix & Match Function: With • Amount of Dollar Discount/ Extra Charge: 20 (Discount)
Entry	1 **[@/FOR]** 1 **[PLU]** 40 2 **[@/FOR]** 1 **[PLU]** 60 3 **[@/FOR]** 1 **[PLU]** 100 Total 200		..... Split-package Individual Item Price ..... Mix & Match 100 - 40 = 60 ..... Mix & Match
	[PACK] 1 **[PLU]** 100 **[3rd PRICE]** 1 **[PLU]** 80 Total 180		..... Whole Package Price ..... Whole Package Price -Dollar Discount Amount

Program Contents	• Whole Package Price: 100 • Whole Package Quantity: 3 • Split-package Individual Item Price: 40 • Quantity Entry Compulsory: None	• HI-CONE Status: With • Mix & Match Function: With • Amount of Dollar Discount/ Extra Charge: 20 (Extra Charge)
Entry Contents	1 **[PLU]** 100 1 **[PLU]** 100 1 **[PLU]** 100 Total 300	..... Whole Package Price
	1 **[@/FOR]** 1 **[PLU]** 40 2 **[@/FOR]** 1 **[PLU]** 60 3 **[@/FOR]** 1 **[PLU]** 100 Total 200	..... Split-package Individual Item Price ..... Mix & Match
	[PACK] 1 **[PLU]** 100 **[3rd PRICE]** 1 **[PLU]** 120 Total 220	..... Whole Package Price ..... Whole Package Price + Extra Charge Amount

10.16 TRIPLE MULTIPLICATION

(1) Department Triple Multiplication

Open Department

• |Length| **[@/FOR]** |Width| **[@/FOR]** → |Unit Price| **[Open DEPT]**
→ |Open-dept Code| **[DP#]** |Unit Price| **[AMT]**

Preset Department

• |Length| **[@/FOR]** |Width| **[@/FOR]** → **[Preset DEPT]**
→ |Preset-Dept Code| **[DP#]**

Preset-price Open

• **[PR OPEN]** (or **[OPEN]**) →
→ |Length| **[@/FOR]** |Width| **[@/FOR]** → |Unit Price| **[Preset DEPT]**
→ |Preset -dept Code| **[DP#]** |Unit Price| **[AMT]**

(2) PLU Triple Multiplication

Open PLU

• |Length| **[@/FOR]** |Width| **[@/FOR]** → |Open-PLU Code| **[PLU]** |Unit Price| **[AMT]**
→ |Unit Price| **[PLU Preset-Code Key]** of Open-PLU

Preset PLU

• |Length| **[@/FOR]** |Width| **[@/FOR]** → |Preset-PLU Code| **[PLU]**
→ **[PLU Preset-Code Key]** of Preset-PLU

Preset-price Open

• **[PR OPEN]** (or **[OPEN]**) →
→ |Length| **[@/FOR]** |Width| **[@/FOR]** → |Preset -PLU Code| **[PLU]** |Unit Price| **[AMT]**
→ |Unit Price| **[PLU Preset-Code Key]** of Preset-PLU

PLU Entry through Barcode Scanner (see NOTE 4 on the next page)

|Length| **[@/FOR]** |Width| → Scan the Barcode of Preset-price PLU
→ Scan the Barcode of Open-price PLU → |Unit Price| **[AMT]**

NOTES:
1. *The Triple Multiplication entries are possible only when the option "Triple Multiplication" is selected (instead of Split Package Pricing).*
2. *Length, Width ..... Max. 3 integral digits + max. 3 decimal digits*
   Unit Price ..... Max. 6 digits
   Product of Length x Width ..... Less than 9999,999
3. *The fraction rounding method is ruled by the process designated for ordinary Quantity Extension entries.*
4. *In a entry sequence using a barcode scanner, an error will result on entering the **[@/FOR]** key for the second time.*

10.17 SINGLE-ITEM DEPARTMENT or SINGLE-ITEM PLU ENTRY

If a department (or PLU) is programmed as Single-item, the department (or PLU) entry sequence will immediately finalizes the sale as cash sale when operated outside a sale.

OPERATION

Same as
- DEPARTMENT ENTRY
- PLU ENTRY
- QUANTITY EXTENSION
- SPLIT PACKAGE PRICING
- TRIPLE MULTIPLICATION

NOTE: *If operated inside a sale,it functions just as an ordinary itemized department or PLU.*

-- Single-item Receipt Print Format --

```
        TEC STORE
     1343 PEACH DRIVE
      PHONE : 87-6437

Open  8:00am to 7:00pm
Closed: every Wednesday

12-19-1994  MON #3001

DP14                $2,10
CASH               $2,10

ITEM  1
JONES        0108 16:27TM
```

10.18 OTHER INCOME DEPARTMENT ENTRY, OTHER INCOME PLU ENTRY

This operation is used to enter items which do not directly become sales for the store, such as lottery, postage, gift wrapping fee, size adjustment fee, utility (payment of electricity and gas), and donation.

OPERATION

Same as DEPARTMENT ENTRY sequence using the Department Key which is programmed as an OTHER INCOME department. When a PLU is used for this purpose, the PLU must be programmed to link to a department with Other Income status.

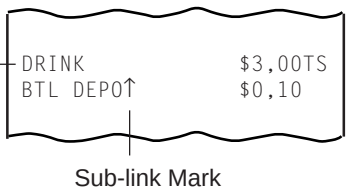
10.19 SUB-LINK DEPARTMENT ENTRY

OPERATION

Head-link Dept Entry → Sub-link Dept Entry (compulsory) → - - -

Example) Dept."DRINK" is programmed as Head-link Dept. and Dept. "BTL DEPO" is programmed as Sub-link Dept. in this example.

-- Receipt Print Format --



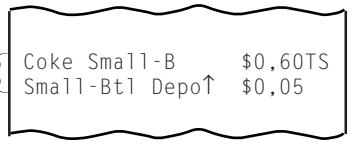
10.19 SUB-LINK PLU ENTRY

OPERATION

Head-link PLU Entry →
- When the Sub-link PLU is of Preset-PLU Type:
  Sub-link PLU Code Entry → - - -
  (automatically entered)
- When the Sub-link PLU is of Open-PLU Type
  |Price| **[AMT]** → - - -
  (compulsory)

-- Receipt Print Format --

Example) PLU "Coke Small-B" is programmed as Head-link PLU and PLU "Small-Btl Depo" is programmed as Sub-link in this example.



NOTE: *For entering a Price of the Sub-link PLU, the **[PLU Preset-code Key]** cannot be used (always use the **[AMT]** key in this case).*

10.20 URGENT PLU MAINTENANCE
(to enter a PLU item not existing in the PLU program file)

OPERATION (Available only to an ECR with PLU expansion memory)

PLU Entry Operation → Error Message "CODE ERROR" is displayed. → Depress **[C]** to cancel the error status.

→ **[PLU ADD]** → (|Quantity| **[@/FOR]**) → |PLU Code| **[PLU]**
in case of quantity extension
Or, scan the barcode.

→ **[DEPT]**
→ |Dept Code| **[DP#]**
Link Department Designation

→ |Unit Price| **[AMT]** → - - -

NOTES:
1. *When a PLU item is successfully entered in the operation procedure above, the item is printed on the receipt and journal. The item name at this time is the name of the Link Department. At the same time, the PLU item is automatically added to the PLU ADDITIONAL FILE. Thus, the added PLU item can now be entered normally on any of the terminals.*
2. *Since PLU items thus added to the PLU file are programmed with the name of the link department and the "zero" status as a provisional measure, it will be a Manager's job to change those PLU tables with proper name and status as a PLU maintenance operation later (described in the Manager's Guide).*

10.21 RETURNED MERCHANDISE

OPERATION

[RTN MDSE] → DEPARTMENT ENTRY
PLU ENTRY
QUANTITY EXTENSION
SPLIT PACKAGE PRICING
TRIPLE MULTIPLICATION
SINGLE-ITEM DEPARTMENT/PLU ENTRY
SUB-LINK PLU ENTRY
(Operate before Head-link PLU to return both items linked together.)
SUB-LINK DEPARTMENT ENTRY
(Operate before each or one of the two items that is returned.) → - - -

-- Receipt Print Format --

```
RTN
BAKERY            -1,45TF
RTN
CAN FOOD          -0,45TF
```

10.22 BOTTLE RETURN

OPERATION

|Bottle Return Amount| **[BTL RTN]**

|Quantity| **[@/FOR]** |Unit Amount| **[BTL RTN]**
max.3 digits (integral value only)

NOTE: • Must not exceed the sale total amount. ..... unless “Credit Balance” option is selected. (See REMARKS below.)

REMARKS: *In using the **[BTL RTN]** key when the “Credit Balance” option is not selected:*
Bottle Return entry after a Department or PLU item
The bottle return amount must not exceed the preceding Department or PLU item amount.
Bottle Return entry after a Subtotal
The bottle return amount must not exceed the subtotal amount.
*(Operating the **[BTL RTN]** key after any other item (**[%+]**, **[%-]**, etc.) than those above, an error will result.)*

-- Receipt Print Format --

```
BTR               -0,05
```

```
      6x     0,05@
BTR               -0,30
```

10.23 DOLLAR DISCOUNT

OPERATION

- - - → Dept or PLU item entry
(for discount from an individual item)
- - - → **[ST]**
(for discount from the sale total)

→ |Amount| **[DOLL DISC]** → - - -

-- Receipt Print Format --

```
VEGETABLE          $1,00TF
DISC               -0,05
```

```
SUBTL             $21,00
DISC               -1,00
```

NOTE: *The discount amount must not exceed the item amount or the subtotal unless the "Credit Balance" option is selected.*

10.24 PERCENT DISCOUNT, PERCENT CHARGE

OPERATION

Dept or PLU entry
Positive Previous Balance entry (credit balance)
[ST]

→ **[%-]** (or **[%+]**)
→ |Rate| **[%-]** (or **[%+]**)

NOTES:
1. *Rate ..... 0.001 to 99.999 (%).*
2. *When the Dept or PLU item entry is modified with **[RTN MDSE]** or **[VOID]**, the following % entry will also be modified with **[RTN MDSE]** or **[VOID]**.*
3. *A % entry will cause an error if operated after a Negative Department/PLU or an Other Income Department/PLU.*

-- Receipt Print Format --

```
FISH               $3,40TF
%-
      5%           -0,17T
```

```
SUBTL              $6,00
%-
     10%           -0,60
```

10.25 STORE COUPON

OPERATION

[STR CPN] → Follow |DEPARTMENT ENTRY
QUANTITY EXTENSION for DEPTs|

-- Receipt Print Format --

```
S.CPN
CAN FOOD           -0,50TF
```

NOTE: *The store coupon amount to be entered must not exceed the sale total unless the "Credit Balance" option is selected.*

10.26 VENDOR COUPON

OPERATION

--- → ([ST]) → |Coupon Amount| **[VND CPN]** → ---

-- Receipt Print Format --

```
V.CPN                -4,00TF
```

NOTE: *The coupon amount to be entered must not exceed the sale total unless the "Credit Balance" option is selected.*

10.27 ITEM CORRECT

OPERATION

-- Receipt Print Format --

```
CAN-FOOD---------$1,00TF
```

DEPARTMENT ENTRY
PLU ENTRY
REPEAT ENTRY
QUANTITY EXTENSION
SPLIT PACKAGE PRICING
TRIPLE MULTIPLICATION
RETURNED MERCHANDISE
BOTTLE RETURN
DOLLAR DISCOUNT
PERCENT CHARGE/DISCOUNT
STORE COUPON
VENDOR COUPON
Previous Balance Entry in CHARGE POSTING
(Manual PB Entry or Customer File Type)
RECEIVED-ON-ACCOUNT Item
PAID-OUT Item
MANUAL TAX

→ **[ITEM CORR]**

NOTES:
1. *When **[ITEM CORR]** is depressed after a Repeat Entry, only the last item of those repeated will be deleted.*
2. *When **[ITEM CORR]** is depressed after a Quantity Extension entry, the entire product (result of multiplication) will be deleted.*

10.28 VOID

The VOID operation is used to delete an item already entered before the last item within the current sale. Such items cannot be deleted by the **[ITEM CORR]** key any longer.

OPERATION

-- Receipt Print Format --

--- → **[VOID]** → DEPARTMENT ENTRY / PLU ENTRY / QUANTITY EXTENSION / SPLIT PACKAGE PRICING / TRIPLE MULTIPLICATION → ---

voids → Void Entry

```
VEGETABLE            $1,00TF
FRUIT                $1,50TF
VOID
VEGETABLE            -1,00TF
```

NOTE: *An amount exceeding the sale total cannot be entered unless the "Credit Balance" option is selected.*

10.29 ALL VOID

When the current transaction being entered is found to be canceled before finalizing it, ALL VOID can be operated to delete all the items entered in the transaction.

OPERATION

Sale Item Entries → **[ALL VOID]** → **[ITEM CORR]** to execute ALL VOID
→ **[C]** to cancel ALL VOID

NOTES:
1. *All Void is possible if the current transaction contains less than 30 items.*
2. *All Void can also be operated to delete a charge posting sale of Manual PB Entry Type or Check Track Type.*
3. *The All Void cannot be operated after an **[EX]** entry or during a Received-on-Account or Paid-Out transaction.*

-- Receipt Print Format --

```
        TEC STORE
     1343 PEACH DRIVE
      PHONE : 87-6437

Open  8:00am to 7:00pm
Closed: every Wednesday

12-19-1994  MON #3001

VEGETABLE          $3,00TF
FRUIT              $1,30TF
SUBTL              $4,30
*  ALL VD          *

JONES        0153 17:22TM
```

10.30 NON-ADD NUMBER PRINT

Non-add numbers can be entered and printed for future references, to indicate codes or numbers of customers, media checks, credit cards, etc. The entered numbers do not affect any sale total data.

OPERATION (allowed any time during a sale or transaction)

(- - - →) |Number| **[#]** → - - -
Max.18 digits.

-- Receipt Print Format --

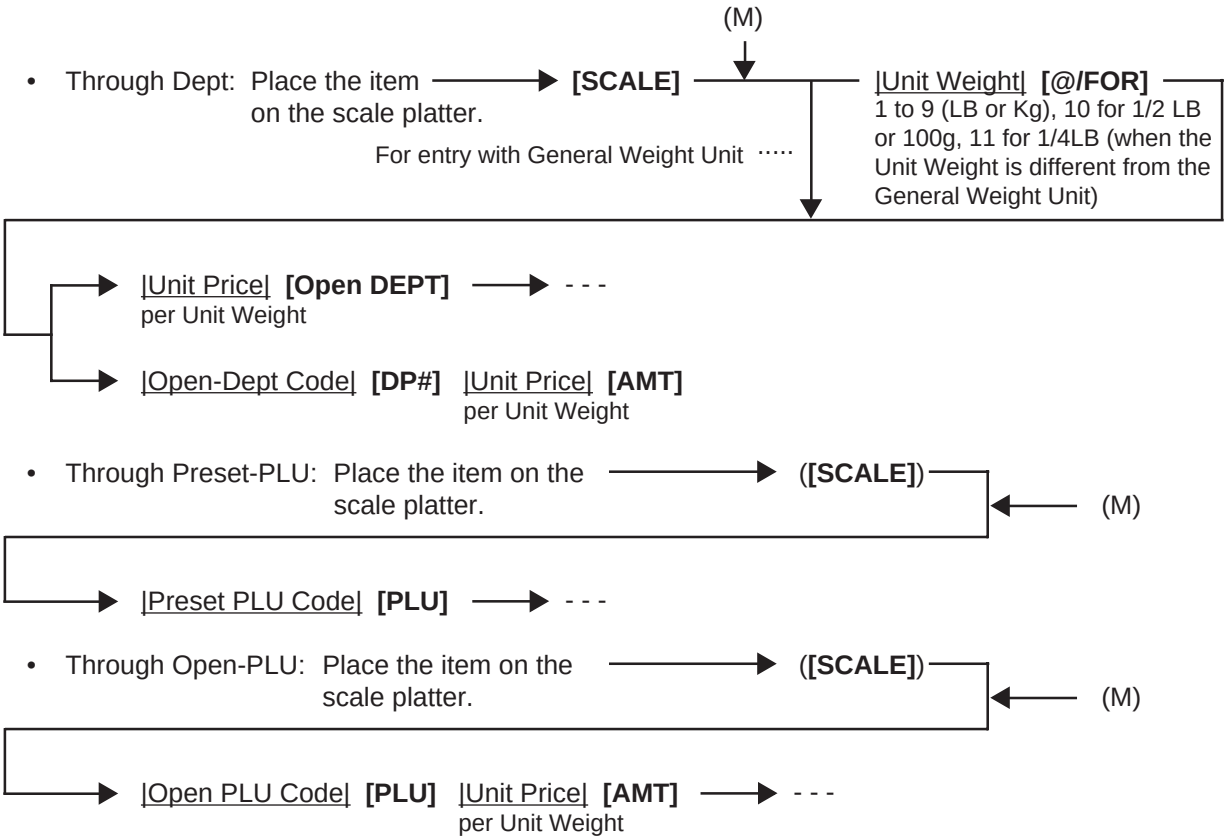
Non-add No.Print

```
#1234
PO                 $6,50
PO                 $7,50
CASH              $14,00
```

10.31 SCALE ENTRY

OPERATION (The department or PLU through which scale items are entered must be a Scale-Allow department or a Scale-Compulsory PLU)

(1) Auto Scale Entry (without tare/tare 2/tare 3, or with tare/tare 2/tare 3 auto-subtraction)



NOTES:
1. *When the PLU is programmed with a Tare Table No., the tare weight is automatically subtracted from the scaled weight, and thus only the net weight is processed.*
2. *If the Tare 2 rate is programmed in the PLU table, a Tare 2 entry is performed when the above Preset/Open PLU entry is performed.*

(2) Auto Scale with Tare/Tare 2/Tare 3

|Tare Table No.| **[TARE]** → to be continued to the arrows marked with "(M)" in the above three operation sequences of the Auto Scale Entry.
1 to 9

|Tare Table No.| **[TARE]** → |Tare 2 Rate| **[TARE 2]** → to be continued to the arrows marked with "(M)" in the above three operation sequences of the Auto Scale Entry.
1 to 9 0 to 99.99 (%)

|Tare 2 Rate| **[TARE 2]** → to be continued to the arrows marked with "(M)" in the above three operation sequences of the Auto Scale Entry.
0 to 99.99 (%)

|Tare Weight| **[TARE 3]** → to be continued to the arrows marked with "(M)" in the above three operation sequences of the Auto Scale Entry.
Any value other than 0, however, less than the weight of scaled item

|Tare Weight| **[TARE 3]** → |Tare 2 Rate| **[TARE 2]** → to be continued to the arrows marked with "(M)" in the above three operation sequences of the Auto Scale Entry.

Any value other than 0, however, less than the weight of scaled item

0 to 99.99 (%)

NOTES:
1. *If the Tare 2 rate is programmed in the PLU table, a PLU entry using |Tare 2 Rate| **[TARE 2]** (third pattern above) cannot be performed.*
2. *The **[TARE 3]** key cannot be used together with the **[TARE]** key.*
3. *Omission of the Tare 3 Entry causes an error if the compulsory status of the Tare 3 Entry has been programmed to a department/PLU item to be entered.*

(3) Manual Scale Entry (It may be prohibited by a program option.)

|Net Weight| of the item → **[SCALE]** → to be continued to the arrows marked with "(M)" in the above three operation sequences of the Auto Scale Entry.

1 to 99999
(unit: g or 1/100LB. For example, enter 5 for 0.05 LB.)

(4) Return or Void Manual Scale Entry (It may be prohibited by a program option.)

[RTN MDSE] for Return →
[VOID] for Void → to be continued to the top of the "Manual Scale Entry" sequence above.

10.32 LISTING CAPACITY OPEN

For Departments and PLUs
Depress **[LC OPEN]** (or **[OPEN]**) prior to or any time during an entry of an open-department, open-PLU, or preset-open department or PLU sequence (including REPEAT and QUANTITY EXTENSION entries). Please note that the **[LC OPEN]** or **[OPEN]** key must be pressed, at latest, before the final key of the entry sequence. The High Amount Limit for the department or PLU will be extended with two higher digits, and the Low Amount Limit will be extended with one lower digit. For entering an amount still exceeding these limits, you must call for a Manager Intervention.

For Media Tender Amounts
Depress **[LC OPEN]** (or **[OPEN]**) before or after the amount but Media Key. The High Amount Limit for the media tendering will be extended with one higher digit. In need of still exceeding this limit, you must call for a Manager Intervention.

For Amounts through **[DOLL DISC]**, **[VND CPN]**, **[STR CPN]**, **[BTL RTN]**
To exceed their limits, you must always call for a Manager Intervention. The **[LC OPEN]** or **[OPEN]** key will not be effective. As for the **[STR CPN]** key only, the amount is limited by both High Amount Limit of the department through which the store coupon amount is entered and the amount limit for **[STR CPN]**. That is, when an amount cannot be entered using **[LC OPEN]** or **[OPEN]**, you must call for a Manager Intervention.

10.33 SELECTIVE ITEMIZER (SI) STATUS MODIFICATION

Depress **[SI/M]** (or **[SI1/M]** and/or **[SI2/M]**) for entering the required Department or PLU item, the same way as **[LC OPEN]** is operated for Departments and PLUs. The SI-net status is reversed to non-net status, and vice versa.

10.34 TAX STATUS or FOOD STAMP STATUS MODIFICATION

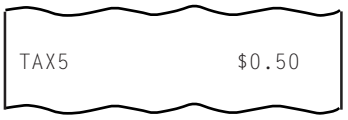
Depress **[TX/M]** (or **[TX1/M]**, **[TX2/M]**, **[TX3/M]**, **[TX4/M]**, **[GST/M]**), in the same way as **[LC OPEN]** is operated, prior to or any time during the entry sequence of the required Department, PLU, or any other tax-status-programmable item (**[DOLL DISC]**, **[%-]**, **[%+]**, **[STR CPN]**, **[VND CPN]**, **[BTL RTN]**). The taxable status is reversed to non-taxable, and vice versa. The **[FS/M]** key operates the same to reverse from the Food Stampable status to non-stampable, and vice versa, of the required item.

10.35 MANUAL TAX ENTRY (where irregular tax amount addition is applied)

OPERATION

--- → |Irregular Tax Amount to be Added| **[TAX]** → ---

-- Receipt Print Format --



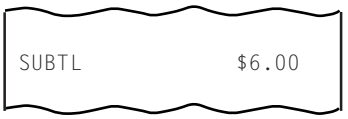
10.36 SUBTOTAL (Sale Total Pre-taxed) READ

OPERATION

--- → **[ST]** → ---

The sale total (pre-taxed) of the items so far entered is displayed (and printed if so programmed), but the sale is not finalized. Additional item entries are allowed, if any.

-- Receipt Print Format --



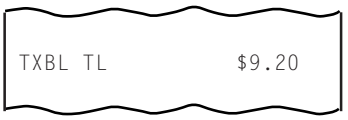
10.37 TAXABLE TOTAL (Sale Total With Taxes) READ

OPERATION

--- → **[TXBL TL]** → ---

The sale total including taxes due of the items so far entered is displayed (and printed if so programmed), but the sale is not finalized. Additional item entries are allowed, if any.

-- Receipt Print Format --



10.38 TAXABLE TOTAL READ and SUBTOTAL PRINT

(when only one of **[ST]** and **[TXBL TL]** keys, not both, is installed on the keyboard)

In this case, the key is usually programmed as **[ST]** key with **[TXBL TL]** functions. Since this key has both **[ST]** and **[TXBL TL]** functions, it may be labeled as "**[ST]**" in some stores or as "**[TXBL TL]**" in others.

OPERATION

--- → **[ST]** → ---
(or **[TXBL TL]**)

The sale total including taxes of the items so far entered is displayed (and the sale total pre-taxed is printed if so programmed), but the sale is not finalized. Additional item entries are allowed, if any.

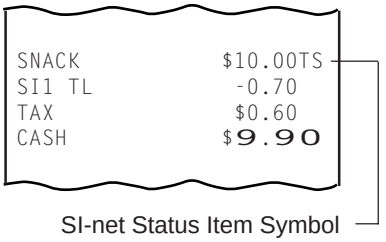
10.39 SELECTIVE ITEMIZER (SI) TOTAL READ

OPERATION

--- → **[SI/TL]** → --- (for Single-SI Machine)
(**[SI1/TL]** and/or **[SI/2TL]** for Dual-SI Machine)

SI Total Calculated

-- Journal Print Format --



The SI total is displayed and printed on journal (and printed on the receipt if so programmed).

NOTE: *The fraction process method is fixed to Round OFF.*

10.40 PLU PRESET PRICE READ

This operation may be used to verify the preset price of an individual PLU.

OPERATION (Any time inside or outside a sale, but prohibited during a short-tendered condition. It is impossible to read the customer file during the training entry.)

(--- →) **[READ]** |PLU Code| **[PLU]** (→ - - -)
(--- →) **[READ]** **[PLU Preset-Code Key]** (→ - - -)
(--- →) **[READ]** → Scan the Barcode of the PLU (→ - - -)
(--- →) **[READ]** |Customer File Code| **[PICK UP BAL]** (→ - - -)

... The operation header “READ” (programmable) and the name of the PLU displayed in the upper row and the preset price of the PLU is displayed in the lower row. When it is an open PLU, nothing will be displayed in the lower row.
No print occurs.

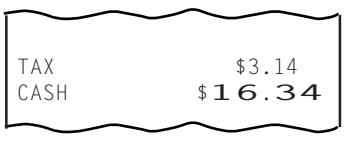
NOTES:
1. *Other items or operations relating or not relating to the read-out PLU may follow. If you want to clear the display content, depress the **[C]** key. It is only a “READ” operation and will not affect any sales data.*
2. *PLU Preset Price Read Operation designated by the **[3rd PRICE]** or **[PACK]** key is available.*

10.41 TAX CALCULATION AND PRINT

Your register has been programmed with proper tax tables (tax breaks and/or tax rates).
Each department or PLU has been programmed with proper tax status, i.e. taxable or non-taxable status of each Tax (of maximum 4 taxes of Tax 1 to Tax 4, and GST).
On finalizing a sale, the taxes due are automatically calculated and printed on the receipt, and thus added to the sale.
Whether all taxes (Tax 1 to Tax 4, and GST) are consolidated into one line print or individually printed in separate lines is a program option.

-- Receipt Print Format --

Example of Consolidated Print Line



Example of Separate Print Lines

10.42 TAX EXEMPTION

OPERATION

Selective Tax Exemption

Examples) **[TX1/M] [EX]** → Sale Finalization ... to exempt from Tax 1 only
[GST/M] [EX] → Sale Finalization ... to exempt from GST only
[TX1/M] [TX2/M] [EX] → Sale Finalization ... to exempt from Tax 1 & Tax 2
[TX1/M] [TX2/M] [TX3/M] [EX] → Sale Finalization ... to exempt from Tax 1, Tax 2, & Tax 3

All Tax Exemption

[EX] → Sale Finalization } to exempt from
[TX1/M] [TX2/M] [TX3/M] [TX4/M] [GST/M] [EX] → Sale Finalization } all taxes

NOTES: *1. On depressing **[EX]**, the sale total including the exempted tax (es) is displayed and pre-taxed amount of the sale portion subject to the tax exemption is printed.*
2. Tax Exemption is unavailable for inclusive taxes.

-- Receipt Print Format --

Pre-taxed amount of the sale portion subject to Tax1
Pre-taxed amount of the sale portion subject to Tax2

```
TAX1EX          $1.50
TAX2EX          $6.00
```

10.43 FOOD STAMPABLE TOTAL READ, FOOD STAMP TENDERING

OPERATION

--- → **[FSTL TEND]** → |Food Stamp Tendered Amount| **[FSTL TEND]** → ---

Displays the Food Stampable Total

Tendering in Food Stamp (This must be operated first of all the payments in finalizing the sale if food stamps are part of the payment.)

... When the Food Stamp tendered amount is less than the sale total, the sale is not finalized with the balance still due displayed. Then it can be finalized with cash or other media total or tendering operations.

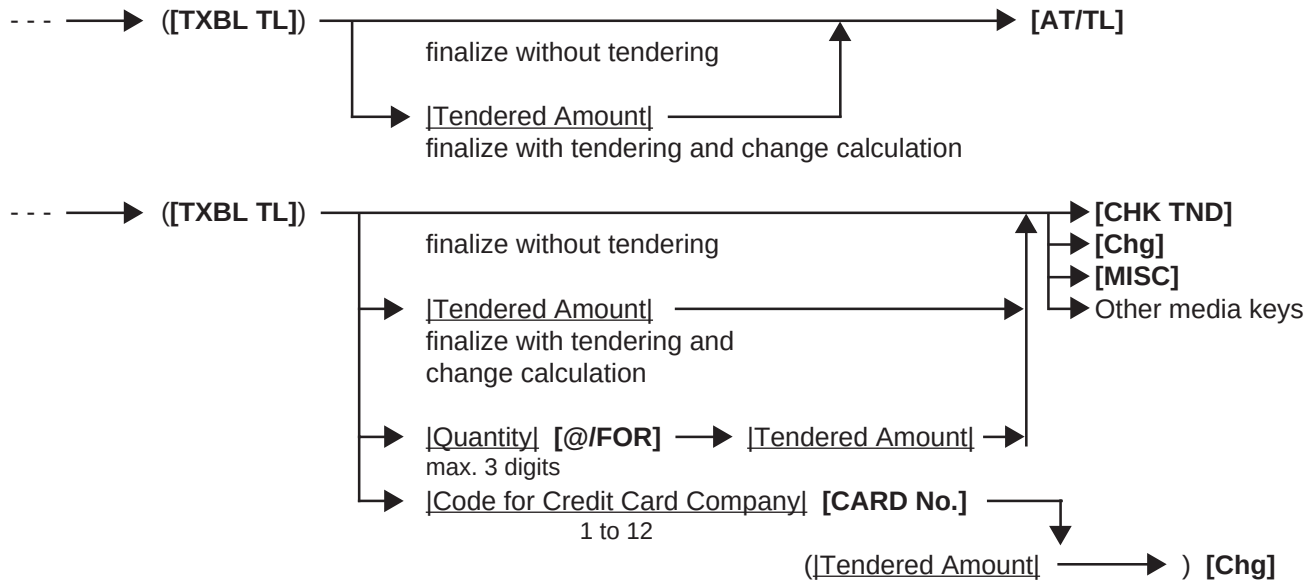
Entire Sale Total
Food Stampable Total
Food Stamp Tendered Amount
Change in Cash
Change in Food Stamp

```
TOTAL          $12.72
FS/TL           $12.72
F-STMP          $15.00
CHANGE           $0.28
FS CHG           $2.00
```

NOTE: *Food Stamp feature is unavailable for the area where inclusive tax feature is used.*

10.44 SALE FINALIZATION BY MEDIA KEYS

OPERATION



NOTES:

1. *Whether each Media Key is depressed with a prior tendered amount entry or not is determined by the key status selections programmed for each media key.*
2. *If the sale total is zero, any Media Key must be depressed without a tendered amount entry even if the key is programmed as "Tender" key.*
3. *When a non-cash media key is programmed as "Tender-only" key, it cannot finalize a negative balance sale. Whether a "Total-only" or "Tender/Total" key can finalize a negative balance sale or not is a program option. Each of non-cash media key with Tender function may be programmed to prohibit Over-tendering and/or Short-tendering.*
4. *When a media is programmed to allow "Total" function, it can also be programmed with the "Drawer Open" or "Not Open" status on operating the key.*

-- Receipt Print Format --

(Cash Total)

```
TAX              $0.48
CASH             $8.48
```

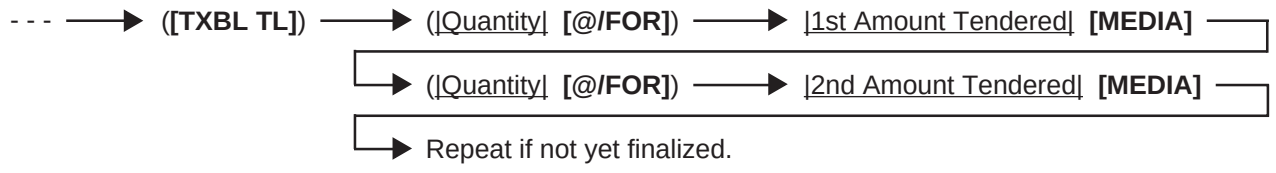
(Cash Tender)

```
TAX              $0.48
TOTAL            $8.48
CATEND          $10.00
CHANGE           $1.52
```

10.45 MULTI-TENDERING

Short-tendering repeated multiple times by the same media (allowed only when the media key is programmed to allow short-tendering).

OPERATION



-- Receipt Print Format --

Multi-tendering by **[AT/TL]** key

Change due, as the result of the 2nd amount tendered

```
TAX              $0.48
TOTAL            $8.48
CATEND           $5.00
CATEND           $5.00
CHANGE           $1.52
```

10.46 SPLIT TENDERING

Short-tendering repeated multiple times by the different media keys (allowed only when the media keys are programmed to allow short-tendering).

OPERATION

Example 1)

- - - → (**[TXBL TL]**) → (|Quantity| **[@/FOR]**) → |Check Amount Tendered| **[CHK TND]**
  - → |Cash Amount Tendered| **[AT/TL]** ... Check & Cash
  - → |Company Code| **[CARD No.]** **[Chg]** ... Check & Credit Card
  - → |Cash Amount Tendered| **[AT/TL]** **[Chg]** ... Check, Cash, & Charge

Example 2)

- - - → (**[TXBL TL]**) → |Cash Amount Tendered| **[AT/TL]**
  - → **[Chg]** ... Cash & Charge

NOTES:

1. *In both MULTI-TENDERING and SPLIT TENDERING operations, the sale is finalized and a receipt is issued on reaching the sale total amount.*
2. *If a media key is depressed without an amount tender entry and the key is programmed to function as "Total" key, the sale is then finalized on that stage processing the balance at that moment into that media.*

-- Receipt Print Format --

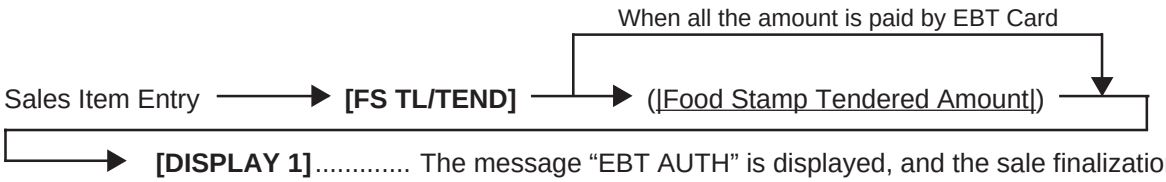
```
TAX              $0.48
TOTAL            $8.48
CHECK            $5.00
CASH             $3.48
```

10.47 SALE FINALIZATION BY EBT (ELECTRONIC BENEFIT TRANSFER)

OPERATION

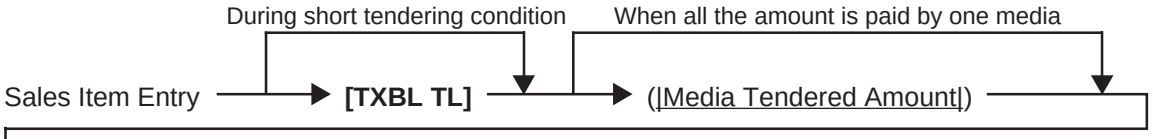
Entry for customer's receipt (1st Receipt)

- Using the EBT Card (for Food Stamp)



[DISPLAY 1]..... The message "EBT AUTH" is displayed, and the sale finalization process is automatically performed as the EBT Card sale.

- Using the Debit Card, Check, Credit Card and Cash EBT Card



[DISPLAY 2]..... The message "DEBIT AUTH" is displayed, and the sale finalization process is automatically performed as the Debit Card sale.

[DISPLAY 3]..... The message "CHECK AUTH" is displayed, and the sale finalization process is automatically performed as the Check sale.

[DISPLAY 4]..... The message "CREDIT AUTH" is displayed, and the sale finalization process is automatically performed as the Credit Card sale.

[DISPLAY 5]..... The message "CASH AUTH" is displayed, and the sale finalization process is automatically performed as the Cash EBT Card sale.

Entry for store's receipt (2nd Receipt)

After the 1st receipt is issued → **[DISPLAY6]**..... The message "RECEIPT" is displayed, and the 2nd receipt (Receipt for store; Copy) is issued.

NOTES:
1. *Do not operate the keys on the keyboard until the 1st receipt (Receipt for customer) is issued.*
2. *This operation is available for the Received-on-Account transaction and the partial payment on the Charge Posting transaction.*
3. *As for the journal print, only the content of the 1st receipt is printed.*
4. *When the Validation Print or the Endorsement Print is necessary, perform it after the 1st receipt is issued. Neither the Validation Print nor the Endorsement Print can be performed after the 2nd receipt is issued.*

-- 1st Receipt Print Format --

```
      TEC STORE
    1343 PEACH DRIVE
     PHONE : 87-6437

Open  8:00am to 7:00pm
Closed: every Wednesday

19-12-1994  MON #3001

PLU000001          10.00T
PLU000002          20.00

APPROVED
AUTHORIZATION NO.
#12345
REFERENCE NO.
#5722
EXP 9/99 VISA      31.00
#4356003111870528

TAX                 1.00
VISA             31.00

ITEM   2
 1CL          0001 09:00TM
```

-- 2nd Receipt Print Format --

```
      TEC STORE
    1343 PEACH DRIVE
     PHONE : 87-6437

Open  8:00am to 7:00pm
Closed: every Wednesday

19-12-1994  MON #3001

STORE COPY
APPROVED
AUTHORIZATION NO.
#12345
REFERENCE NO.
#5722
I AGREE TO PAY BELOW
TOTAL AMOUNT ACCORDING
TO ISSUER'S AGREEMENT

X_____________________
EXP 9/99 VISA      31.00
#4356003111870528
TOTAL            31.00

 1CL          0001 09:00TM
```

10.48 SALE FINALIZATION BY EFT (ELECTRONIC FUND TRANSFER)

Sale transaction by the various cards such as credit card, etc. is executed via the EFT terminal.

Cards available

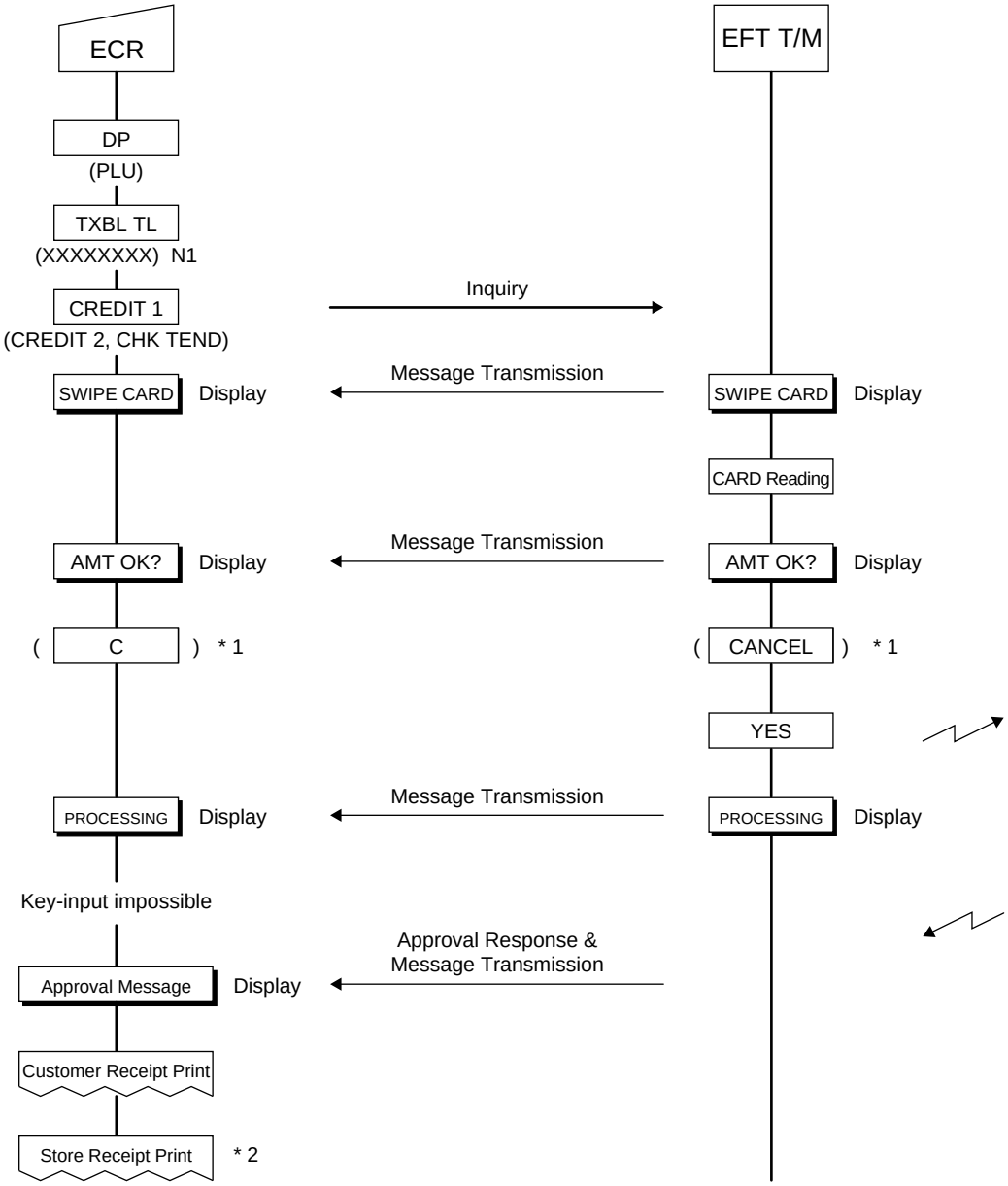
- Check
- Credit 1 (Master Card, Visa, American Express, etc.)
- Credit 2 (Discover)
- Debit
- EBT Cash
- EBT Food Stamp

1) EFT Media Key Entry
   EFT transaction is executed using the EFT media keys.

OPERATION

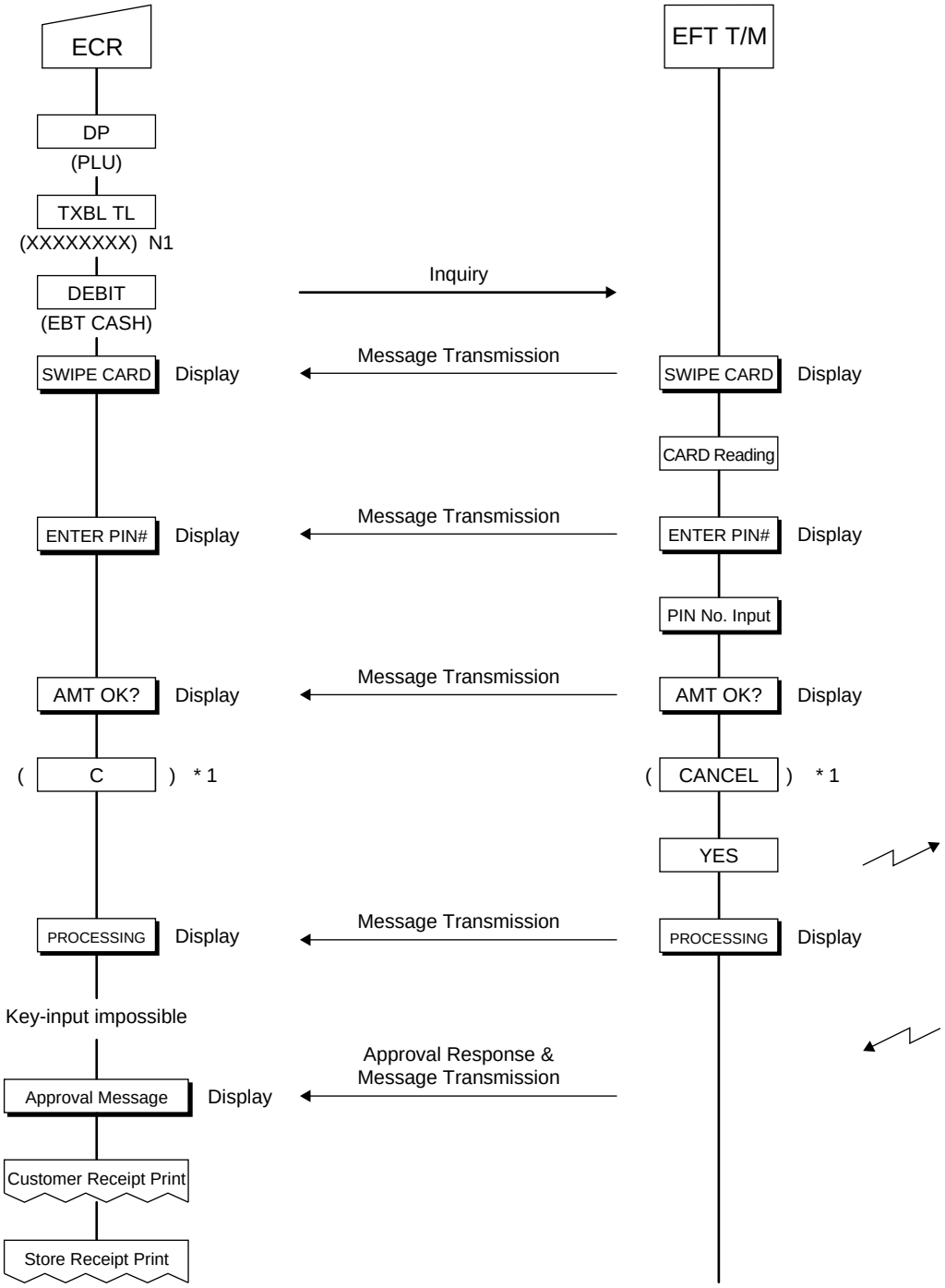
Mode Lock: REG, MGR and ⊡ (Credit 1 & 2, Debit and EBT Food Stamp)
Mode Lock: REG and MGR (EBT Cash and Check)

1-1) Credit 1 Card, Credit 2 Card and Check Card



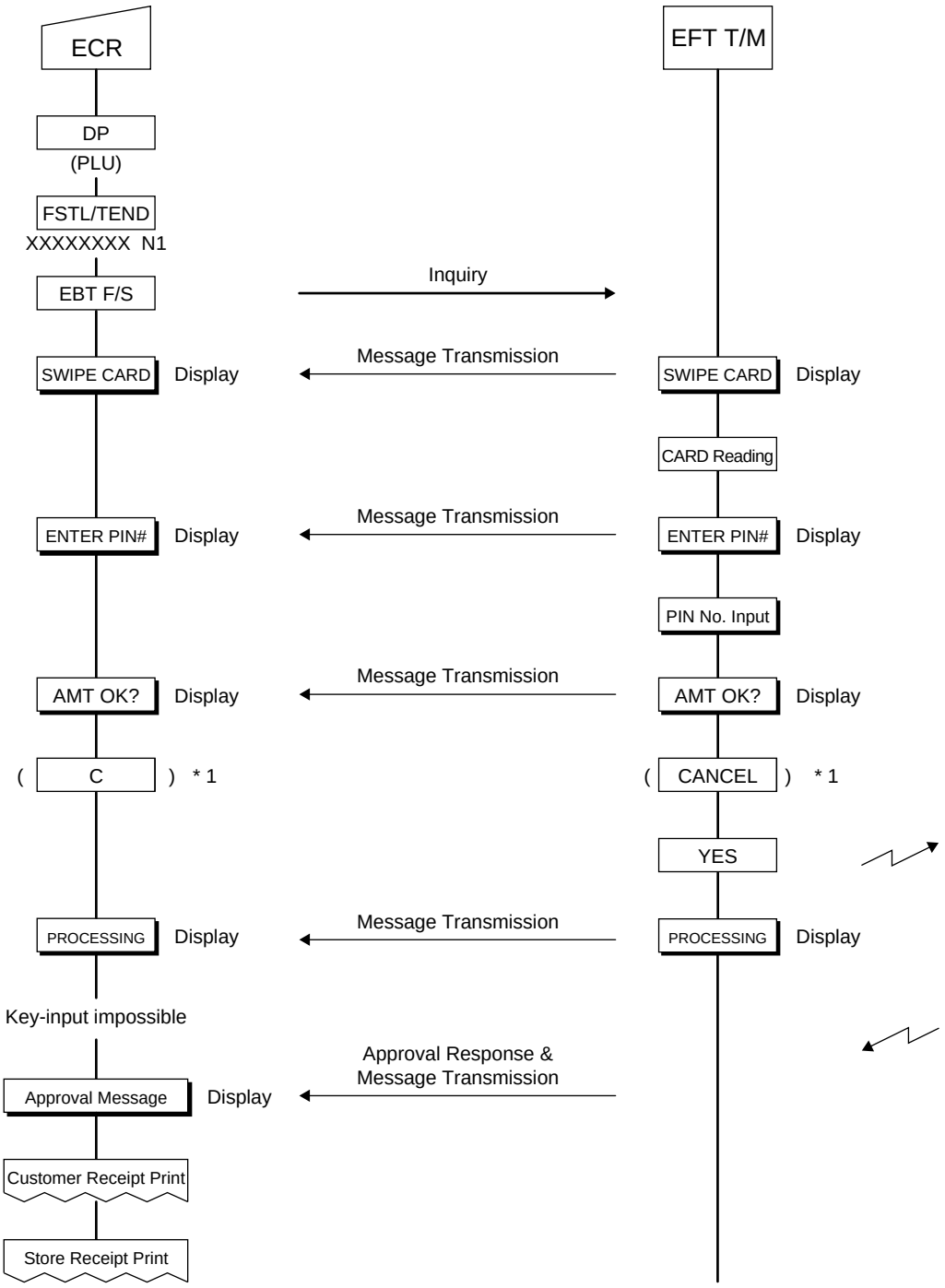
N1: Tendered amount (Omissible if all the amount is paid, however depending on the program option)
*1: Cancel operation (Goes back to the display of subtotal amount)
*2: No print for the check card

1-2) Debit Card and EBT Cash Card



N1: Tendered amount (Omissible if all the amount is paid)
*1: Cancel operation (Goes back to the display of subtotal amount)

1-3) EBT Food Stamp Card (Food Stamp Payment Type)



N1: Tendered amount (Not omissible even if all the amount is paid. Over tendering is prohibited.)
*1: Cancel operation (Goes back to the display of subtotal amount)

NOTES:
1. *This operation performed in the ⊟ mode results in the returned merchandise transaction. However, use of the EBT Cash Card and the Check Card in the ⊟ mode is unavailable.*
2. *Receipt post-issue operation after finalizing a sale by the EFT is unavailable.*
3. *Key operation on the ECR is unavailable during the inquiry to the host.*
4. *EFT entry is also available to the partial payment on the received-on-account and the charge posting transactions.*
5. *Negative balance sales cannot be finalized by the EFT media keys.*

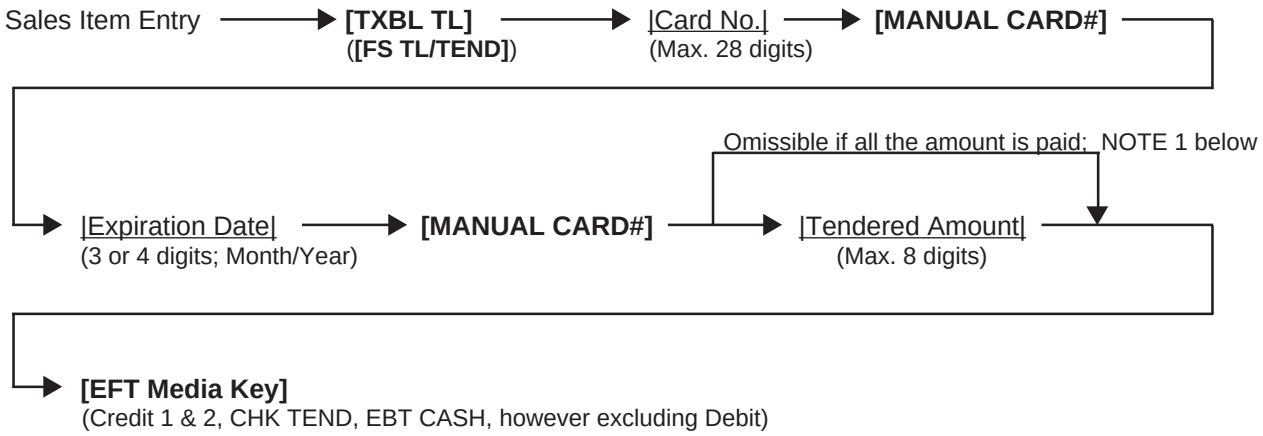
6. *To finalize the EFT approval sale, multi-tendering or split-tendering operation is allowed up to 4 times. Attempt of the fifth tendering operation will cause an error. After reaching the fourth tendering operation, the sale finalization is allowed only using the **[AT/TL]** key or another media key of which status is "without the EFT process".*

2) Manual Card No. Entry

When the EFT terminal cannot read information contained in a card, the EFT approval entry will be executed by manually entering a card No. and the expiration date on the ECR.

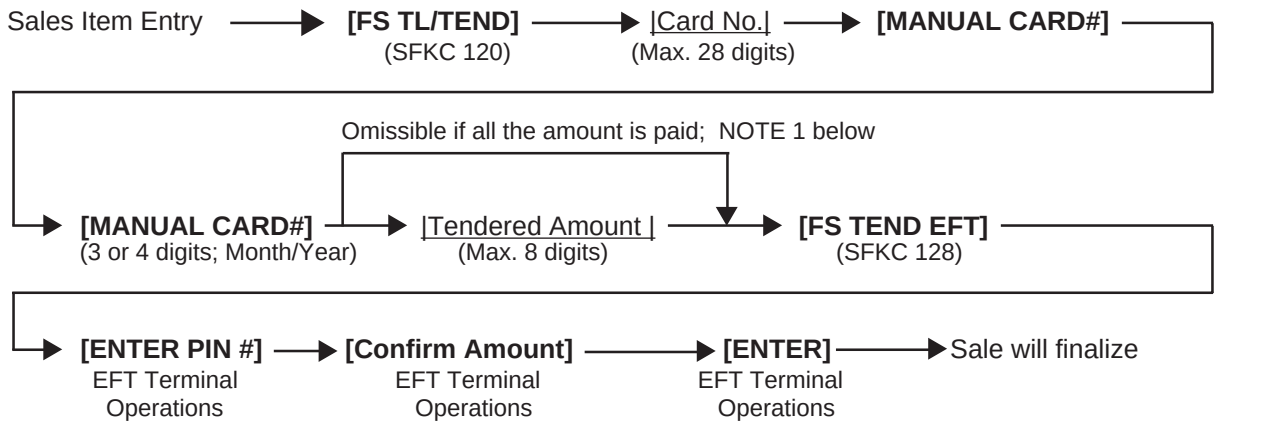
OPERATION

Mode Lock: REG, MGR and ⊡ (Credit 1 & 2)
Mode Lock: REG and MGR (EBT Cash and Check)



OPERATION

Mode Lock: REG, MGR and ⊡ (EBT Food Stamp)



NOTES:

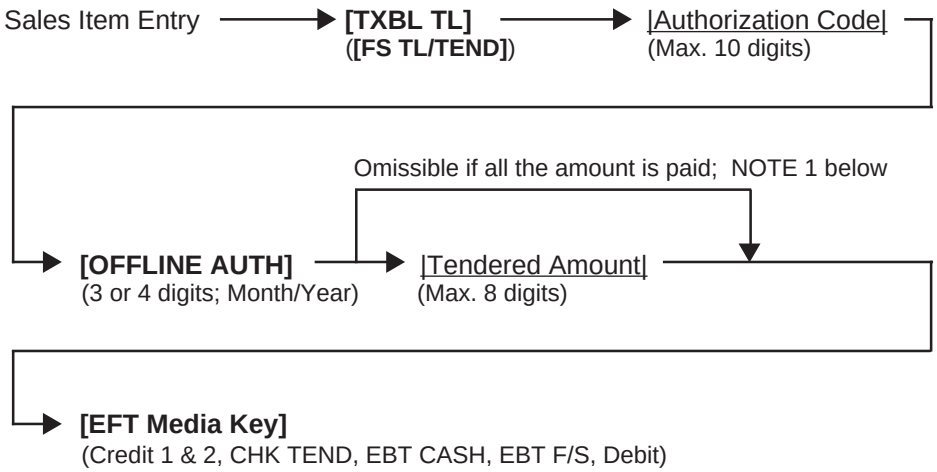
1. *Entry of tendering amount is omissible if a customer pays all the amount. However, when the EBT F/S card of the food stamp payment type is used, the entry of tendering amount is not omissible and is always required.*
2. *When the **[MANUAL CARD #]** key is depressed after entering a card No., the display message "ENTER EXP DATE" (initial setting; programmable) will be displayed in the dot windows of the display.*
3. *If the entry of expiration date is skipped, the EFT process will be executed with no data.*
4. *Before depressing the **[EFT Media Key]**, a card No. manually entered can be canceled by depressing the **[C]** key.*
5. *After depressing the **[EFT Media Key]**, the same EFT process as that of "EFT Media Key Entry" will be executed. However, the card reading is unnecessary.*

3) Off-line EFT Authorization Entry

When the EFT system is in trouble and down, the EFT transaction can be finalized on the ECR. To obtain the authorization code of the EFT approval, you tell the customer's card data and the amount of purchase to the EFT authorization company on the telephone.

OPERATION

Mode Lock: REG, MGR and ⊡ (Credit 1 & 2, Debit and EBT Food Stamp)
Mode Lock: REG and MGR (EBT Cash and Check)



NOTES:
1. *Entry of tendering amount is omissible if a customer pays all the amount. However, when the EBT F/S card of the food stamp payment type is used, the entry of tendering amount is not omissible and is always required.*
2. *Before depressing the **[EFT Media Key]**, an authorization code entered can be canceled by depressing the **[C]** key.*
3. *When the **[EFT Media Key]** is depressed, the financial total name "OFFLINE AUTH" (initial setting; programmable) and the authorization code will be printed on both the receipt and the journal. However, if the authorization code is not entered, only the financial total name will be printed.*

4) Manual Issue of Store Receipt

On the ECR with the manual cutter printer provided, this operation is used to manually issue the store receipt.

OPERATION

Mode Lock: REG, MGR and ⊡

[STORE RECEIPT]

NOTES:
1. *In case of the tendering operation (multi- or split-), the **[STORE RECEIPT]** key can be depressed at the same number of times as its operation. (Allowed up to 4 times)*
2. *Starting the new sale transaction before issuing the store receipt causes an error.*
3. *Even when the check is used to finalize the EFT sale, the store receipt for check will not be issued.*

5) Cashing
Cashing operation can be executed using the EBT Cash card, the Check card and the Debit card.

OPERATION (must be operated outside a sale)

Mode Lock: REG and MGR

|Amount to be cashed| **[EBT CASH]**..... Drawer opens and the receipt is issued.
Max. 8 digits (**[CHECK]**, **[DEBIT]**)

NOTE: *When the validation print compulsory status or the endorsement print compulsory status has been programmed to the media key, the drawer opens after performing the corresponding print.*

10.49 CHECK CASHING (No-sale cashing of a non-cash media)

OPERATION (must be operated outside a sale)

|Check Amount to be Cashed| **[CHK TND]** ... The drawer opens to enable the exchange.

NOTE: *Other non-cash media keys may be used for this purpose if programmed to allow no-purchase cashing.*

-- Receipt Print Format --

Check Amount Cashed

```
      TEC STORE
    1343 PEACH DRIVE
     PHONE : 87-6437

Open  8:00am to 7:00pm
Closed: every Wednesday

19-12-1994  MON #3001

CHECK          $10.00

JONES        0189 17:44TM
```

10.50 SALE PAID IN FOREIGN CURRENCIES

OPERATION

- - - → **[TXBL TL]** → **[CUR1]** → |Amount Tendered in Foreign Currency| → **[CUR1]** → **[AT/TL]**

[TXBL TL]: Mandatory for a sale paid in foreign currencies.

[CUR1]: Displays the equivalent value in Foreign Currency 1.

|Amount Tendered in Foreign Currency|: Display the entered foreign currency amount.

[CUR1]: Displays the domestic currency value equivalent to the tendered foreign currency.

[AT/TL]: Other media keys may be used if paid in that media.(The media key must be programmed to allow tendering in this case.)

NOTES:
1. *The **[CUR 2]** to **[CUR 5]** keys operate the same as **[CUR 1]**, except that each of these keys has its own exchange rate programmed corresponding to each foreign currency.*
2. *The amount tendered in the foreign currency and its exchange rate may be programmed to print by program options.*
3. *Multi-tendering with the same foreign currency or Split-tendering with other medias or foreign currencies are possible.*

4. *The foreign currency keys cannot be used to finalize Received-on-Account payments, Paid-out items, or charge posting (sale with previous balance).*
5. *When a tendering by a foreign currency occurs during a short-tendered condition, the **[ST]** key will not be mandatory.*
6. *A sale of zero or negative balance cannot be finalized using any of the foreign currency keys.*

-- Receipt Print Format --

Optional Print { Amount Tendered in CUR1 / CUR1 Exchange Rate

```
TAX                  $0.48
TOTAL                $8.48
CUR1                 50.00
        5,3729*
CATEND               $9.31
CHANGE               $0.83
```

10.51 NO-SALE EXCHANGE from Foreign Currency to Domestic Currency

OPERATION (must be operated outside a sale)

[CUR1] ⟶ |Amount of Foreign Currency 1 to be exchanged| **[NS]**

... The drawer opens to enable exchange. Displays the domestic currency amount equivalent to the entered foreign currency amount.

NOTES:
1. *The **[CUR 2]** to **[CUR 5]** keys operate the same.*
2. *The fraction process method is fixed to Round OFF.*

-- Receipt Print Format --

Amount of CUR2 to be exchanged
Exchange Rate (optional print)
Domestic Currency amount equivalent to the CUR2

```
CUR2                 10,00
        1,7619*
CHANGE               $5,68

BROWN          0197 18:02TM
```

10.52 NO-SALE EXCHANGE from Domestic Currency to Foreign Currency

OPERATION (must be operated outside a sale)

|Amount of Domestic Currency to be exchanged| **[CUR 1]** ⟶ **[NS]**

... The drawer opens to enable exchange. The display content of the CUR 1 value obtained on the **[CUR1]** key depression is held.

NOTES:
1. *The **[CUR 2]** to **[CUR 5]** keys operate the same.*
2. *This operation (exchange from domestic to foreign currencies) may be prohibited by a program option.*
3. *The fraction process method is ruled by "Foreign Currency Rounding Process Setting".*

-- Receipt Print Format --

Domestic Currency amount to be exchanged
Exchange Rate of CUR3 (optional print)
CUR3 amount equivalent to the domestic currency amount

```
CATEND            $1,00
      1,445*
CUR3               1,45

JONES       0197 18:03TM
```

10.53 RECEIVED-ON-ACCOUNT

A received-on-account transaction is used to identify money which is in the drawer but not from the daily business.

OPERATION

|Amount of Payment| **[R/A]** → (**[ST]**) → |Cash Amount Tendered| **[AT/TL]** (if paid in cash)

Repeatable if multiple amounts are received in one receipt sequence.

(|Quantity| **[X]**) → |Check Amount Tendered| **[CHK TND]** (if paid in check)

[Chg] (if processed into charge account)

Other Media Finalization

This portion is the same as SALE FINALIZATION BY MEDIA KEYS already described.

NOTES:
1. *The media keys used for this operation must be programmed to allow received-on-account entries.*
2. *MULTI-TENDERING and SPLIT-TENDERING (already described)are also applied to the finalization of received-on-account payments.*

-- Receipt Print Format --

```
R/A                $5,00
R/A                $3,00
SUBTL              $8,00
CASH               $8,00

JONES       0199 18:04TM
```

10.54 PAID-OUT

A paid-out transaction is used when money is removed from the drawer without totaling to a sale.

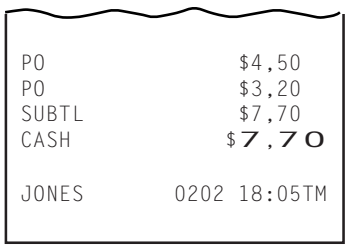
OPERATION (must be operated outside a sale)

|Amount to be paid out| **[PO]** → (**[ST]**) → **[AT/TL]**

Repeatable if multiple amounts to be paid out are recorded in one receipt sequence.

NOTE: *Only **[AT/TL]** can finalize paid-out amounts (i.e. must always be paid out in cash).*

-- Receipt Print Format --



10.55 SALESPERSON ENTRY (Salesperson Sign-ON)

OPERATION

|Salesperson Code| **[SALES PERSON]** ⟶ - - -
1 to 99

... The name of the person is displayed and printed on both journal and receipt.

Programmable options relating to Salesperson Entries:
- Salesperson's name non-print on receipt (print on journal only)
- Salesperson Entry compulsory before sale item entries
- Salesperson Entry Prohibited during a sale (i.e. allowed only one person entry at the starting of a sale but prohibits any other salesperson entry once the sale is started.) When this program option is not selected, up to five salespersons can sign ON during one sale.

The salesperson entry status (salesperson Signed-ON condition) will be held until:
- Another salesperson entry is operated, or
- The sale is finalized.

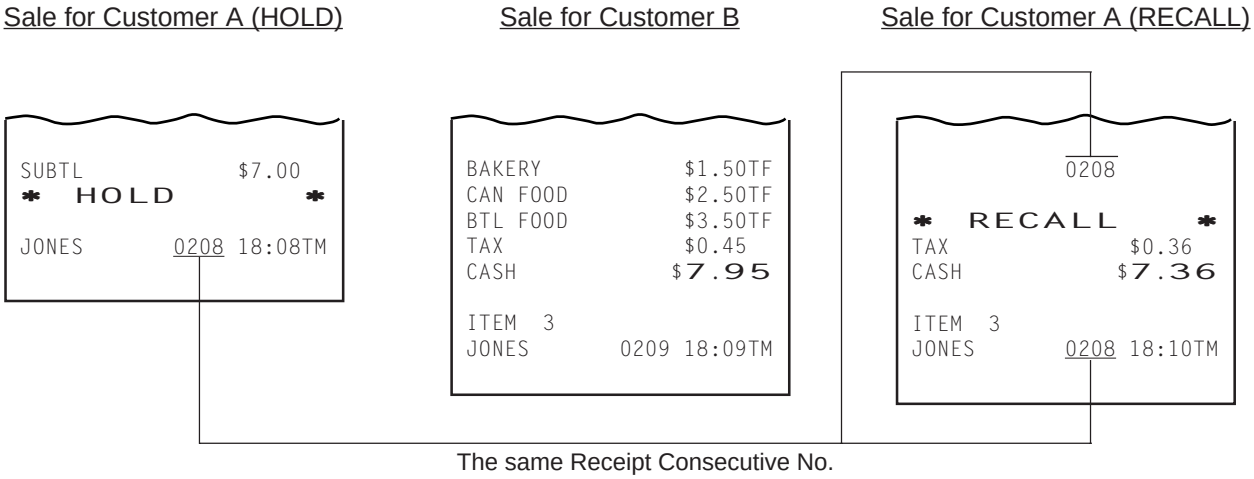
-- Receipt Print Format --

Salesperson Code Salesperson's Name

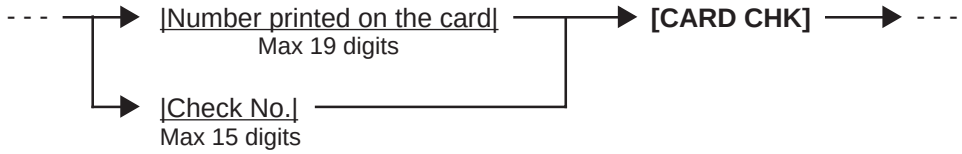
10.56 HOLD & RECALL

OPERATION

Sales item entries for Customer A ⟶ **[HOLD/RECALL]** ⟶ Temporary finalization of Customer A Sale (HOLD) ⟶ Operate sale item entries and finalize for Customer B. ⟶ **[HOLD/RECALL]** ⟶ Recalling Customer A Sale (RECALL) ⟶ Additional entries if any and real sale finalization for Customer A.



10.57 CREDIT CARD No. CHECK



This operation is allowed at the top of a sale or any time during a sale including while a sale is being finalized, or a received-on-account transaction is being operated. When an error results, the operator calls the manager. The manager then can select one of the following solutions:

1. Tells the customer that the card cannot be accepted referring to the displayed status code (1 to 9). (Or, lets the operator do so without calling the manager.)
2. To allow payment by this card as an exceptional case for some reason, depress the **[C]** key to clear the error, then turn the Mode Lock to “MGR” position using the MGR or MA key, and depress the **[CARD CHK]** key. The card No. is then accepted and printed.

NOTES:
1. *The card check function is activated in the REG mode only; in MGR or ⊟ mode, the card No. entry is accepted without an inquiry to the “Card No. Negative Check List”.*
   Please also note that the card check function can be set to “active” or “non-active” in the MGR mode (described in Manager’s Guide.)
2. *It is programmable to prohibit finalizing a sale before the card check operation by programming the compulsory card check to each media key.*

10.58 RECEIPT POST-ISSUE

OPERATION (must be operated outside a sale)

(A sale is finalized) ⟶ **[RECEIPT ISSUE]**

Programmable options:

- Post-issue receipt is available only when the sale has been finalized with Receipt-OFF mode.
- Available regardless of Receipt-ON/OFF mode (in this case two receipts may be obtained for one sale.)

- Post-issue receipt is itemized receipt for a sale of maximum 50 lines. Exceeding 50 lines, the post-issue receipt is total-only receipt.
- Post-issue receipt is always total-only receipt regardless of the number of lines of a sale.

- Post-issue receipt is issued only once.
- Post-issue receipt can be issued any number of times.

NOTES:
1. *The post-issue receipt content will not be printed on the Remote Slip Printer.*
2. *The post-issue receipt is not available for Paid-Out transactions.*
3. *The program option allows you to select that the post-issue receipt operation is available for the Received-on-Account transaction, the Charge Posting transaction and the Hold & Recall transaction. However, when the Charge Posting transaction is finalized by the **[PO]** key, the post-issue receipt operation cannot be unconditionally performed.*

-- Ordinary Receipt --

```
12-19-1994  MON #3001

VEGETABLE          $1,00TF
Cheese-Half Pck    $2,50TF
%-
    5%             -0,13T
TAX                $0,06
TOTAL              $3,58
CATEND             $5,00
CHANGE             $1,42

ITEM  2

JONES         0213 18:14TM
```

-- Post-issue Receipt --

Itemized Type

```
12-19-1994  MON #3001

*  COPY             *
VEGETABLE          $1,00TF
Cheese-Half Pck    $2,50TF
%-
    5%             -0,13T
TAX                $0,06
TOTAL              $3,58
CATEND             $5,00
CHANGE             $1,42

ITEM  2

JONES         0213 18:14TM
```

Total-only Type

```
12-19-1994  MON #3001

*  COPY             *
TOTAL              $3,58

JONES         0213 18:20TM
```

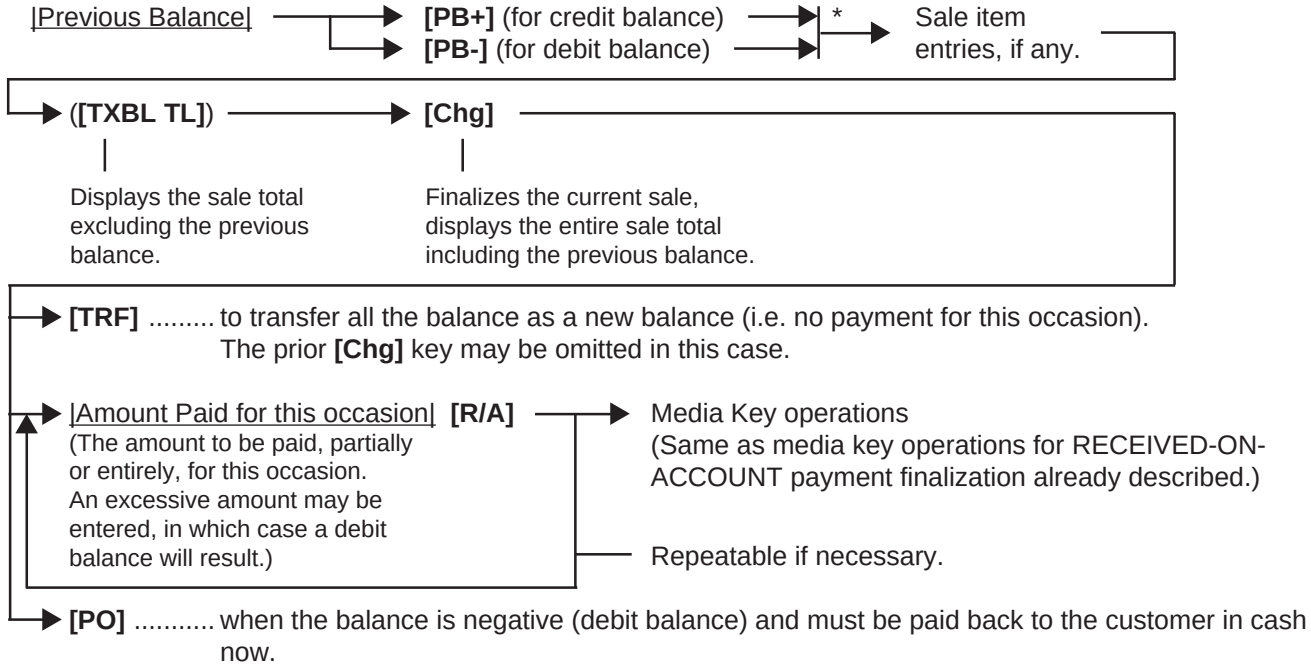
This line is printed only when a post-issue receipt is issued after the Ordinary Receipt is issued, or the second and subsequent post-issue receipts are issued.

10.59 CHARGE POSTING: Previous Balance Manual Entry Type

OPERATION

(1) To initiate charge posting for a new customer
0 **[PB+]** (or **[PB-]**) ⟶ Follow the line marked with "*" in Operation 2 below.
zero

(2) Charge posting with a previous balance first entered (pre-select) with or without PAYMENT



(3) Charge posting with a previous balance entered during a sale (post-select)
A previous balance (including a zero balance for a new customer) may be entered not only before sale items but also after or between them if the **[Chg]** key has not been depressed. Multiple previous balance entries are possible within a sale (for the purpose to sum up multiple accounts into one, etc.).

(4) Percent rate addition to a previous balance
|Previous Balance| **[PB+]** ⟶ (|Rate|) **[%+]** ⟶ - - -

NOTES: *1. The **[%-]** key operates the same for percent discounting.*
*2. The previous balance entered through **[PB-]** (debit balance) will not allow %+ or %- operation.*

Charge Posting Operation Sample (Previous Balance Manual Entry Type)

OPERATION CONTENTS	KEY OPERATION	**DISPLAY** (Lower Row)
To open a new customer account:	0 **[PB+]**	0. 0 0
Sale Items:		
$3,50 Dept.1	350 **[DEPT 1]**	3. 5 0
$2,40 Dept.3	240 **[DEPT 3]**	2. 4 0
Finalize this sale.	(**[Chg]**)	6. 2 5
To transfer all the balance without payment.	**[TRF]** *(See Receipt 1 below.)*	6. 2 5
The above customer comes to the store for payment.	625 **[PB+]** (previous balance)	6. 2 5
All his balance is read.	**[Chg]**	6. 2 5
He will pay all the balance today.	625 **[R/A]**	6. 2 5
He tenders $7,00 in cash.	700 **[AT/TL]** *(See Receipt 2 below.)*	0. 7 5
The balance of the customer is now zero.		
Give the change to the customer in cash.		

-- Receipt Print Format --

Receipt 1

```
        TEC STORE
     1343 PEACH DRIVE
      PHONE : 87-6437

Open  8:00am to 7:00pm
Closed: every Wednesday

12-19-1994  MON #3001

PB+              $0,00
VEGETABLE        $3,50TF
MEAT             $2,40TF
TAX1             $0,35
Chg              $6,25

NEW BAL          $6,25

ITEM  2
JONES       0142 16:46TM
```

New Balance is transferred as PB.

Receipt 2

```
        TEC STORE
     1343 PEACH DRIVE
      PHONE : 87-6437

Open  8:00am to 7:00pm
Closed: every Wednesday

12-19-1994  MON #3001

PB+              $6,25
Chg              $6,25
R/A              $6,25
CATEND           $7,00
CHANGE           $0,75

NEW BAL          $0,00

ITEM  0
JONES       0143 16:46TM
```

10.60 CHARGE POSTING: **Customer File Type** (Check Track Memory Option)

OPERATION

(1) To initiate charge posting for a new customer

|Customer File Code| **[PICK UP BAL]** → Follow the line marked with "*" in Operation 2 below.
(Must be one of those already opened in the "SET" mode and its balance must be zero.)

|New Customer File Code| **[CODE OPEN]** →
(any 1 to 12-digit code not yet opened in the "SET" mode) ... (The use of **[CODE OPEN]** may require a Manager Intervention.)

(2) Charge posting with a previous balance first entered (pre-select) with or without Payment

|Customer File Code| **[PICK UP BAL]** → * → Sale item entries, if any.

→ (**[TXBL TL]**) → **[Chg]**

(**[TXBL TL]**): Displays the sale total excluding the previous balance.

[Chg]: Finalizes the current sale, displays the entire sale total including the previous balance.

→ **[TRF]** ..... to transfer all the balance as a new balance (i.e.no payment for this occasion). The prior **[Chg]** key may be omitted in this case.

→ |Amount Paid for this occasion| **[R/A]** → Media Key operations
(The amount to be paid, partially or entirely, for this occasion. An excessive amount may be entered, in which case a debit balance will result.)
(Same as media key operations for RECEIVED-ON-ACCOUNT payment finalization already described.)

Repeatable if necessary.

→ **[PO]** ..... when the balance is negative (debit balance)and must be paid back to the customer in cash now.

(3) Charge posting with a previous balance entered during a sale (post-select)
A previous balance recalled through **[PICK UP BAL]** (or a zero balance by **[PICK UP BAL]** or **[CODE OPEN]**) may be entered not only before sale items but also after or between them if the **[CRT]** key has not been depressed. But, this operation is allowed only once in a sale.

(4) Percent rate addition to a previous balance

|Customer File Code| **[PICK UP BAL]** → (|Rate|) **[%+]** → - - -

NOTES: *1. The **[%-]** key operates the same for percent discounting.*
2. When the balance recalled is negative (debit balance), neither %+ nor %- can be operated.

Charge Posting Operation Sample (Check Track Memory Option)

OPERATION CONTENTS	KEY OPERATION	**DISPLAY** (Lower Row)
Mr. JAMES HAILY comes and you start charge posting for him.	1 **[PICK UP BAL]**	0. 0 0
Sale Items:		
$1,20 Dept.1	120 **[DEPT 1]**	0 1 1. 2 0
$3,50 Dept.3	350 **[DEPT 3]**	0 3 3. 5 0
Finalize this sale.	(**[Chg]**)	4. 9 8
To transfer all the balance without payment.	**[TRF]** *(See Receipt 1 below.)*	4. 9 8
Mr. JAMES HAILY now comes to pay	1 **[PICK UP BAL]**	4. 9 8
all his account balance.	**[Chg]**	4. 9 8
He tenders $10,00 in cash.	498 **[R/A]**	4. 9 8
The balance is now zero due to the payment.	1000 **[AT/TL]** *(See Receipt 2 below.)*	5. 0 2
Give the change to the customer in cash.		

-- Receipt Print Format --

Receipt 1

```
        TEC STORE
    1343 PEACH DRIVE
     PHONE : 87-6437

Open  8:00am to 7:00pm
Closed: every Wednesday

12-19-1994  MON #3001

PB+     000000000001
JAMES HAILY
                 $0,00
FRUIT            $1,20TF
MEAT             $3,50TF
TAX1             $0,28
Chg              $4,98

NEW BAL          $4,98

ITEM  2
JONES       0052 15:12TM
```

Customer File Code
Customer's Name & Balance

Receipt 2

```
        TEC STORE
    1343 PEACH DRIVE
     PHONE : 87-6437

Open  8:00am to 7:00pm
Closed: every Wednesday

12-19-1994  MON #3001

PB+     000000000001
JAMES HAILY
                 $4,98
Chg              $4,98
R/A              $4,98
CATEND          $10,00
CHANGE           $5,02

NEW BAL          $0,00

ITEM  0
JONES       0053 15:15TM
```

10.61 FUNCTION KEY ENTRY

This operation will execute a string of key operations preprogrammed on each **[FUNCTION]** key.

OPERATION

--- → **[FUNCTION]** (→ ---)
⋮
[FUNCTION 1] to **[FUNCTION 10]**

- The following key operations are preprogrammed on the **[FUNCTION 1]** key in this example.
  [1] [00] [DP1] [ST] [AT/TL]

-- Receipt Print Format --

```
        TEC STORE
     1343 PEACH DRIVE
      PHONE : 87-6437

Open  8:00am to 7:00pm
Closed: every Wednesday

12-19-1994  MON #3001

VEGETABLE          $1,00TF
SUBTL              $1,00TF
TAX                $0,21
CASH              $1,06

ITEM  1
JONES        0207 18:07TM
```

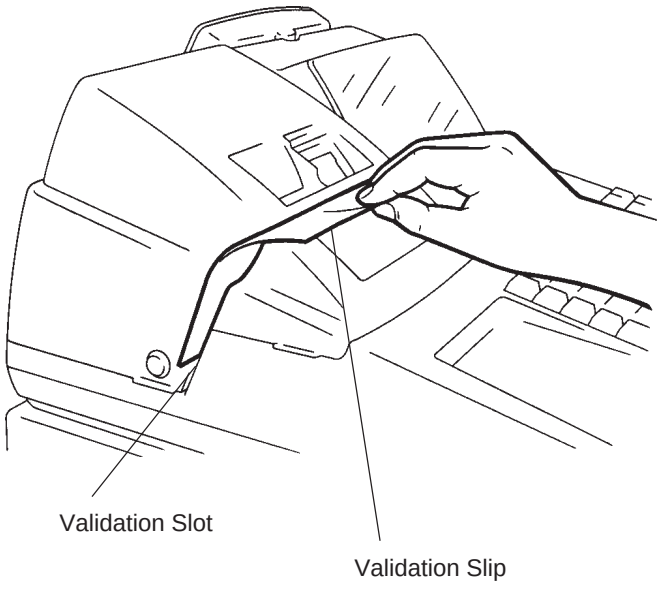
10.62 VALIDATION PRINT

OPERATION

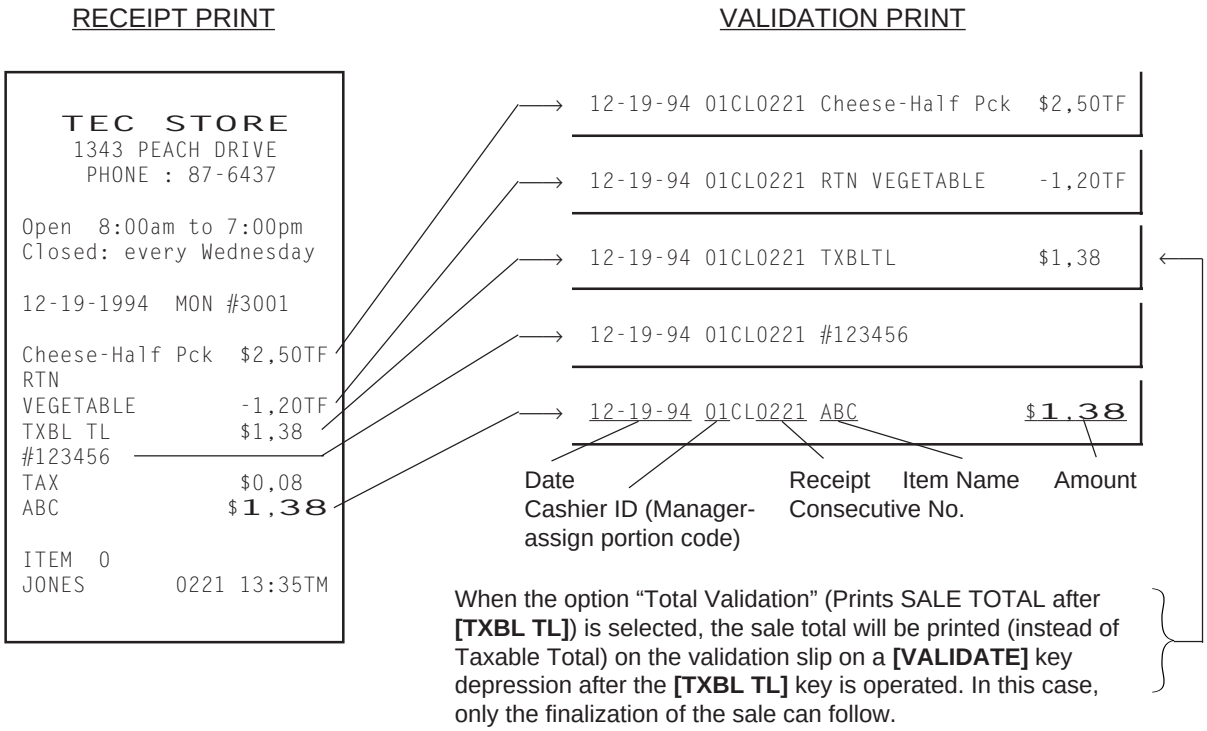
After entering the required item through a transaction key or media key *(**NOTE** 1)* → Insert a validation slip into the validation slot. Make sure that the "SLIP" lamp is steadily lit. *(**NOTE** 2)* → **[VALIDATE]**

NOTES:

1. *If the "SLIP" lamp flickers during registrations, it indicates that the last item just entered is programmed to require validation print. In this case, no other operations can follow until the validation print of the item is first executed.*
2. *Because printing occurs on the front side of the slip, please be certain to insert the slip into the validation with the printing side frontward.*
3. *No other operations can follow until the validation slip once printed is withdrawn.*
4. *The following are programmable selections relating to validation:*
   (1) PRINT FORMAT
   a) Date Print/Non-print
   b) Consecutive No. Print/Non-print
   c) Cashier No. Print/Non-print
   (2) MULTI-or SINGLE-VALIDATION (Number of times of validation print allowed for the same item)
   (3) VALIDATION COMPULSORY status on Media Keys and other transaction keys.



5. *When the sale-finalizing media key is programmed with Validation Compulsory status and the key is used with over-tendering, the drawer will open on the compulsory validation print.*
6. *When the sale-finalizing media key is programmed with Validation Compulsory status and the key is used with equal-tendering or used as Total key, the drawer will open even if the status "Not Open" is programmed on the key.*



10.63 ENDORSEMENT PRINT

OPERATION

After operating the required non-cash media key (usually the **[CHK TND]** key) → Insert the check or the required slip into the Remote Slip Printer (or into the Validation Slot of the Receipt/Journal Printer with Multi-validation Function.) → Enter the check No. (if so programmed), and then depress **[CHECK NO.]** key.

NOTES:
1. *Endorsement Message can be printed on the Receipt/Journal Printer with Multi-validation Function.*
2. *The Check No. entry prior to the **[CHECK NO.]** key may be programmed to be compulsory.*
3. *Endorsement print performed after the received-on-account transaction is available.*

-- Endorsement Print Sample --

Printed on Remote Slip Printer:

```
12-19-1994  MON #3001

VEGETABLE          -1,20TF
FRUIT               $6,50TF
MEAT                $6,00TF
TAX                 $0,68
TOTAL             $11,98
CHECK               $15,00
CHANGE               $3,02

ITEM  1
JONES         0222 14:35TM
```

```
CHECK No324628
TEC  STORE
    1343 PEACH DRIVE, TORRANCE,
CALIFORNIA
       TOTAL                $11,98
#3001  CHECK                $15,00
   1CL            0222 12-19-1994 14:35TM
```

Check No. Line
Endorsement Message Lines
Total Line (may not be printed)
Check Amount Line
Cashier ID, Consecutive No., Date, Time

Printed on Receipt/Journal Printer:

```
TEC  STORE
    1343 PEACH DRIVE, TORRANCE,
CALIFORNIA
       TOTAL                $11,98
#3001  CHECK                $15,00
   1CL            0222 12-19-1994 14:35TM
```

10.64 COMMENT PRINT

OPERATION

Print of the programmed message

|Comment Message Code| **[COMMENT]** ..... Programmed message corresponding to the designated code is printed on the receipt and the remote slip. (On the register with the EBT feature adopted, the message is also printed on the journal.

1 to 10

* On the register with the EBT feature adopted, use the messages initially programmed. For others, each message can be optionally programmed.

Print of a message using character code entry

[COMMENT] → Character Code Entry → **[COMMENT]** ..... Message entered by character code is printed on the receipt and the remote slip. (On the register with the EBT feature adopted, the message is also printed on the journal.)

(Max. 24 characters; 2-digit code is assigned to each character as shown on the table on the next page.)

Column Code →

Row Code ↓

ROW \ COL	0	1	2	3	4	5	6	7	8	9
0		*	4	>	H	R	¥	f	p	z
1	!	+	5	?	I	S	]	g	p	{
2	"	,	6	@	J	T	^	h	r	|
3	#	–	7	A	K	U	_	i	s	}
4	$	.	8	B	L	V	`	j	t	~
5	%	/	9	C	M	W	a	k	u	⍁
6	&	0	:	D	N	X	b	l	v	
7	’	1	;	E	O	Y	c	m	w	
8	(	2	<	F	P	Z	d	n	x	
9	)	3	=	G	Q	[	e	o	y	

Example) Character code “00” is assigned to “SPACE”.
Character code “34” is assigned to “B”.

NOTES: *1. This operation is available any time outside a sale or inside a sale including during the short tendering condition, however except the following.*
During the Loan transaction
During the Pick Up transaction
During the Paid Out transaction
2. Neither the Item Correct transaction nor the Validation Print is effective for this operation.

10.65 REMOTE SLIP PRINTER (hardware option) OPERATION

The TEC Remote Slip Printer DRS-207 may be connected to the MA-1650 series ECR as an optional device. The Remote Slip Printer will operate printing if a slip is properly inserted, regardless of the Mode Lock position (except that no print will occur in the “SET” mode or during program verification in the “X” mode).

1. The remote slip printer will automatically activate printing when the slip has properly been set to the printer table.

2. The following are selective status programmable relating to the remote slip printer. Ask the store manager and mark the status selected for your store.
   PROGRAM OPTIONS RELATING TO REMOTE SLIP CONTROL
   - Remote Slip Print compulsory for any Previous Balance entry in “REG” or “MGR” mode:
     Standard: FREE (Not compulsory)
     Option: COMPULSORY (applies to any Previous Balance entry whether it is the Manual PB Entry type or the Customer File (Check Track) Memory type.
   - Code No.(Check No.) Entry Before **[CHECK NO.]** key at Endorsement Print (Refer to ENDORSEMENT PRINT operation already stated.)
     Standard: FREE (Not compulsory)
     Option: COMPULSORY

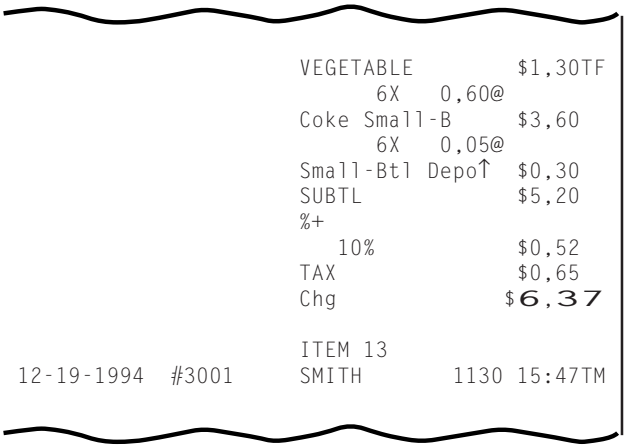
3. The gap of the slip inlet is usually opened, and the slip may be inserted or withdrawn freely outside a receipt/journal print sequence.
   When a slip is properly set to the remote slip printer and the ECR is operated, the gap will be closed and printing will be performed. When the sale is finalized and the receipt is issued, the gap of the DRS-207 will be opened to allow the slip withdrawal. (The gap keeps closed during sale item entries.)

4. The EJECT key on the DRS-207 may be used to open the closed gap in order to withdraw the slip and skip unnecessary item print. The EJECT key will be disregarded if the slip is set and the ECR receipt/journal printer is in a printing action.
5. Printing on the remote slip will be performed alternately with printing on the receipt/journal of the ECR.

As typical application of remote slip printing, print formats of invoice and Charge Posting Customer Sale File are placed below.

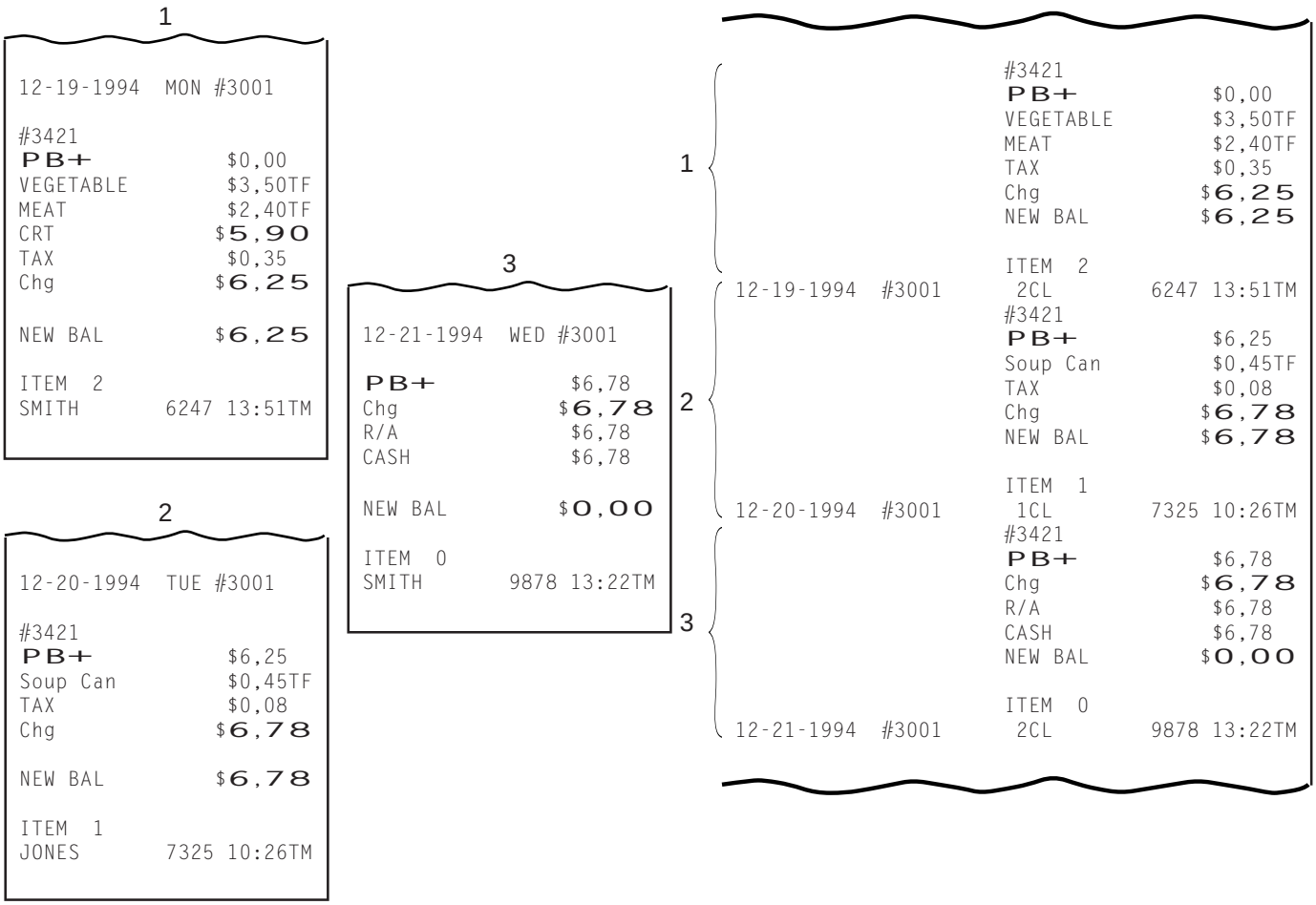
-- Invoice Print Format --

```
12-19-1994  MON #3001

VEGETABLE          $1,30TF
      6X   0,60@
Coke Small-B
                   $3,60
      6X   0,05@
Small-Btl Depo↑
                   $0,30
SUBTL              $5,20
%+
   10%             $0,52
TAX                $0,65
Chg               $6,37

CRT               $5,72

ITEM 13
SMITH        1130 15:47TM
```



```
                   VEGETABLE          $1,30TF
                         6X   0,60@
                   Coke Small-B       $3,60
                         6X   0,05@
                   Small-Btl Depo↑    $0,30
                   SUBTL              $5,20
                   %+
                      10%             $0,52
                   TAX                $0,65
                   Chg               $6,37

                   ITEM 13
12-19-1994  #3001  SMITH        1130 15:47TM
```

-- Charge Posting Sale File Print Format (PB Manual Entry Type) --



10.66 WHEN A POWER FAILURE OCCURS ...

If a power failure occurs, all sales data stored in the memory are automatically protected by the battery installed in the ECR. The battery is rechargeable and it is recharged when the AC power returns. As the power returns, the register revives to continue the work and displays the last item entered before the power failure. However, please note the following phenomena to occur on the register when the power is regained:

1. The printer will work to print the entered data without failure after the power recovery, if any data was being printed. However, one extra line may be fed on the power recovery depending on the power-recovery timing.

Example:

One extra line is fed here, i.e., a power failure occurred during printing the returned item of “VEGETABLE $1,45”.

2. The following are the display indications on the power recovery:

ECR CONDITION at the time of Power Failure		DISPLAY INDICATION on the Power Recovery
OUTSIDE A SALE	No key-in has been operated.	Displays zero. Operations may go on.
	Numeric or Declaration keys have been entered but not motorized keys.	Regains the display content that was obtained just before the power failure. The operations may be continued.
DURING A SALE	No Numeric or Declaration keys have been entered.	Regains the display content that was obtained just before the power failure. The operations may be continued.
	Numeric or Declaration keys have been entered.	

In the event of a power failure, it is suggested to check the receipt print content before the receipt is handed to the customer.

11. JOURNAL AND RECEIPT PAPER-END DETECTOR

(1) This detects when either the journal or receipt paper is coming near the end. It is provided in order to prompt the operator to replace the old paper roll with a new one.

(2) When the paper roll comes near the end (or the paper has not been set properly), no key operation will be accepted and the AMOUNT portion of the display will keep flickering.

(3) When a new paper roll is set, only the **[RF]** and **[JF]** keys are allowed to operate. Next, when the **[C]** key is depressed, the display flickering will be cleared and normal key-in operations will be accepted. If any printing was suspended, it will continue printing.

(4) If this detector senses a paper-end condition during printing, the printing will stop after the current line printing is completed.

(5) If the **[C]** key is depressed in the paper-end condition, it will be ignored. The **[C]** key depression will be effective to clear the display flickering only after the new paper roll is set.

(For further details, refer to Chapter 15.)

12. ECR PRINTER MOTOR LOCK DETECTOR

(1) This detects the printer motor lock condition caused by some trouble.

(2) When such a condition is detected, the front display indicates “Error” and none of the keys (including **[RF]** and **[JF]**) will be accepted.

(3) To regain the normal condition, turn the power of the ECR to OFF, remove the cause of the motor lock, and then turn the power to ON again.

13. REMOTE SLIP PRINTER MOTOR LOCK DETECTOR

(1) This detects the remote slip printer motor lock condition caused by some trouble.

(2) When such a condition is detected, the front display indicates “Error” and none of the keys (including **[RF]** and **[JF]**) will be accepted.

(3) To regain the normal condition, turn the powers of the ECR and the remote slip printer to OFF, remove the cause of the motor lock, and then turn the powers to ON again.

* If the cause cannot be found in the remote slip printer and only the ECR may be required to work temporarily without the remote slip printer, remove the remote printer cable from the ECR, and turn the power of the ECR to ON.

14. PRINTER GUIDE OPEN DETECTOR

(1) This detects the printer guide open condition.

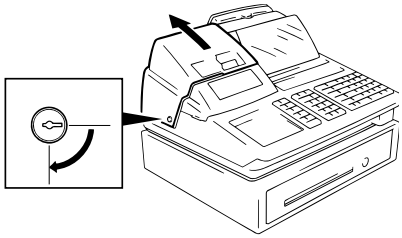
(2) When such a condition is detected, the front display indicates “Error” and none of the keys (including **[RF]** and **[JF]**) will be accepted.

(3) To regain the normal condition, turn the power of the ECR to OFF, close the printer guide, and then turn the power to ON again.

15. PAPER ROLL REPLACEMENT AND OTHER MAINTENANCE OPERATIONS

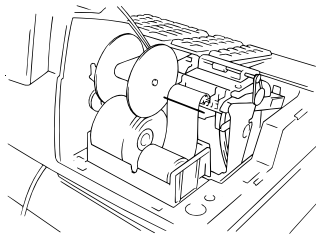
15.1 Replacing the Receipt Roll

WARNING!
Care must be taken not to injure yourself with the paper cutter.



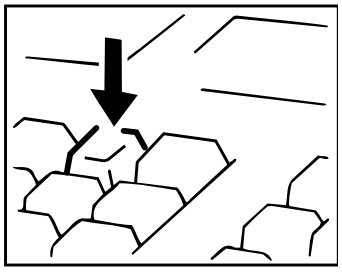
1

To remove the Receipt Cover, insert the Receipt Cover Key to the Receipt Cover Lock, and turn it 90° clockwise.



2

Cut the Receipt Paper as shown in the figure.



3

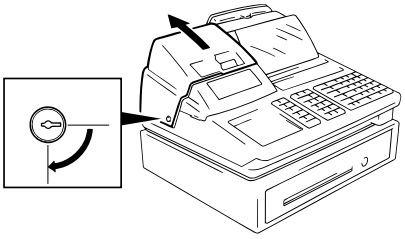
Depress the **[RF]** key to feed the remaining paper end.

CAUTION: *Never try to pull out the remaining paper end by hand. It may cause paper jamming.*

4

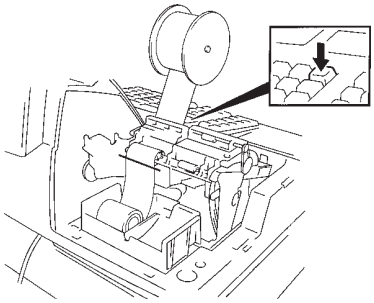
Load new paper roll as described in Chapter 6.

15.2 Replacing the Journal Roll



1

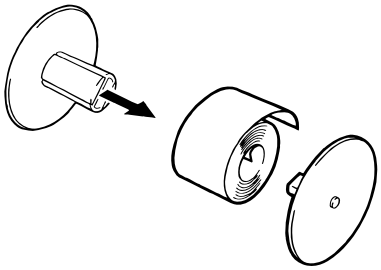
To remove the Receipt Cover, insert the Receipt Cover Key to the Receipt Cover Lock, and turn it 90° clockwise.



2

Depress the **[JF]** key to wind up enough of the Journal Paper, then cut the paper as shown in the figure. Depress the **[JF]** key to feed the remaining paper end.

CAUTION: *Never try to pull out the remaining paper end by hand. It may cause paper jamming.*



3

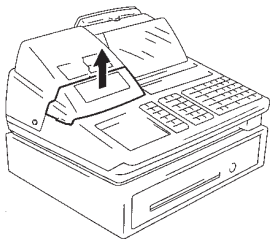
The wound-up portion of the paper can be easily removed from the Reel by pulling it sideways.

4

Load new paper roll as described in Chapter 6.

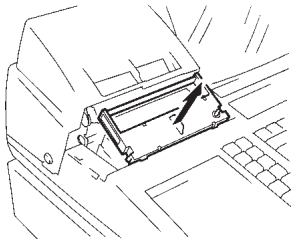
15.3 Replacing the Ribbon Cassette

When the print data on the receipt and journal becomes too dim, replace the Ribbon Cassette in the following order.



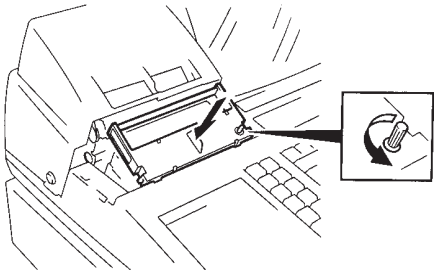
1

Remove the Ribbon Cover.



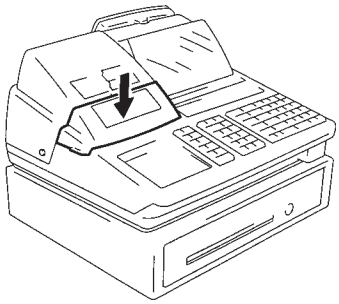
2

Remove the old ribbon cassette by pulling it the direction of the arrow mark.



3

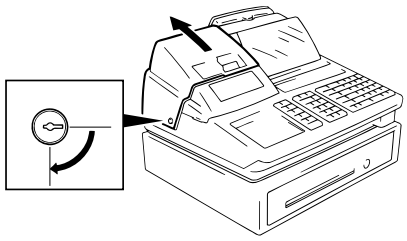
Install a new ribbon cassette by inserting it in the direction of the arrow mark.
Then, turn the knob of ribbon cassette several times in the arrow direction to take up the slack in the ribbon.



4

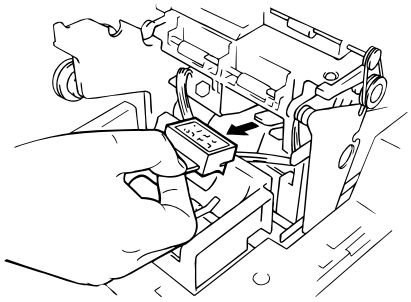
Attach the Ribbon Cover.

15.4 Replenishing Ink to the Store Name Stamp



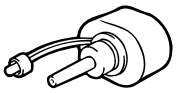
1

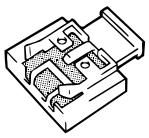
To remove the Receipt Cover, insert the Receipt Cover Key to the Receipt Cover Lock, and turn it 90° clockwise.



2

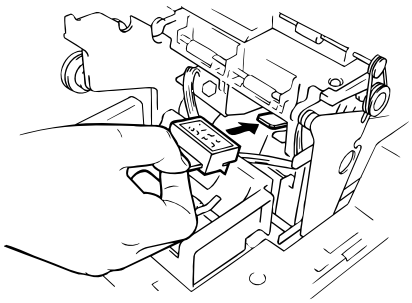
Remove the Store Name Stamp by pulling it in the direction of the arrow mark.





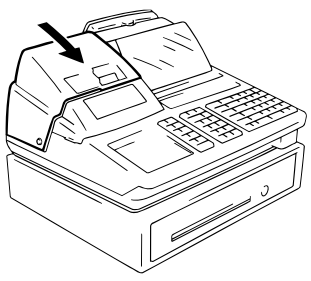
3

Apply only two or three drops. Stamp may not print dark immediately. Allow time for ink to saturate the stamp.



4

Install the stamp by inserting it in the direction of the arrow mark.



5

Attach the Receipt Cover.

15.5 Manual Drawer Releasing

The drawer opens automatically when a transaction has been entered. In the event of a power failure or other trouble, the drawer can be opened manually in the following manner:

WARNING!
When opening the cash drawer, be careful not to let the drawer hit any person.

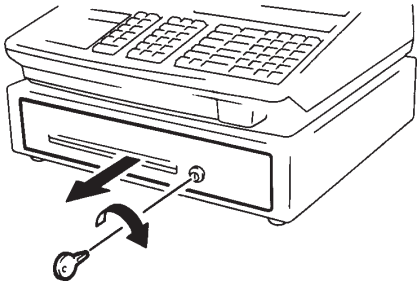


Fig.1

1

Insert the Drawer Release Key into the drawer release lock and turn the key clockwise. The drawer will then open. (Fig.1)

2

The Drawer Release Key can be taken out by returning it to the original position.

3

When the drawer is closed, it is automatically locked and will not open without the Drawer Release Key or a normal registering operation.

15.6 Removing the Drawer

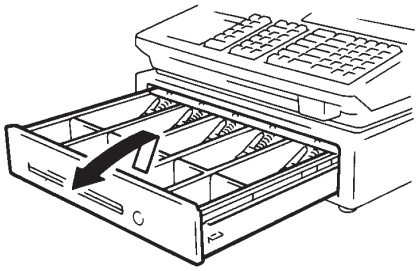


Fig. 2

1

Pull the drawer out, and when it stops at the stopper, lift the drawer up and pull it further out (Fig.2). When it stops again at the roller fixed in the drawer housing, lift it and pull it out (Fig.3).

2

To return the drawer, follow the reverse procedure for removing.

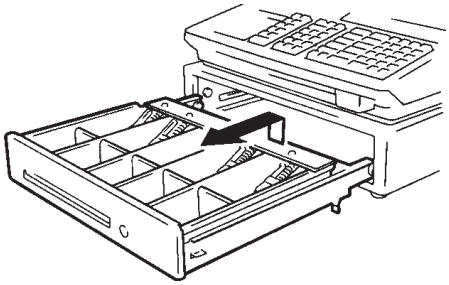
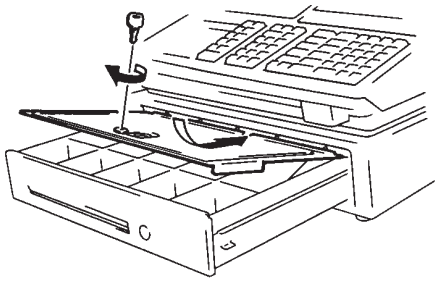


Fig. 3

15.7 CDC (Cash Drawer Cover; Option) Lock

Locking (Fig.4)



1

Push the Cash Drawer Cover to the back of the drawer.

2

Press the cover lightly, insert the key into the key hole on the cover, and turn it to lock.

Fig. 4

Unlocking

Unlock the cover using the key, and lift the front end.

16. SPECIFICATIONS

Size ..... 460 mm (width) x 450 mm (depth) x 348 mm (height)
(height including rubber feet)
(or 412 mm-height when Customer Display is popped up.)

Weight ..... 16.5 kg

Power Required ..... AC 117 V ±10 %; 60 Hz
(varies depending on the destination)

Power Consumed ..... 0.6 A at 117 V

Ambient Temperature ..... 0 °C to 35 °C, 10% to 90% Relative Humidity

Size of Receipt and Journal Tape ..... 45 mm (width) x Max. 80 mm (diameter)

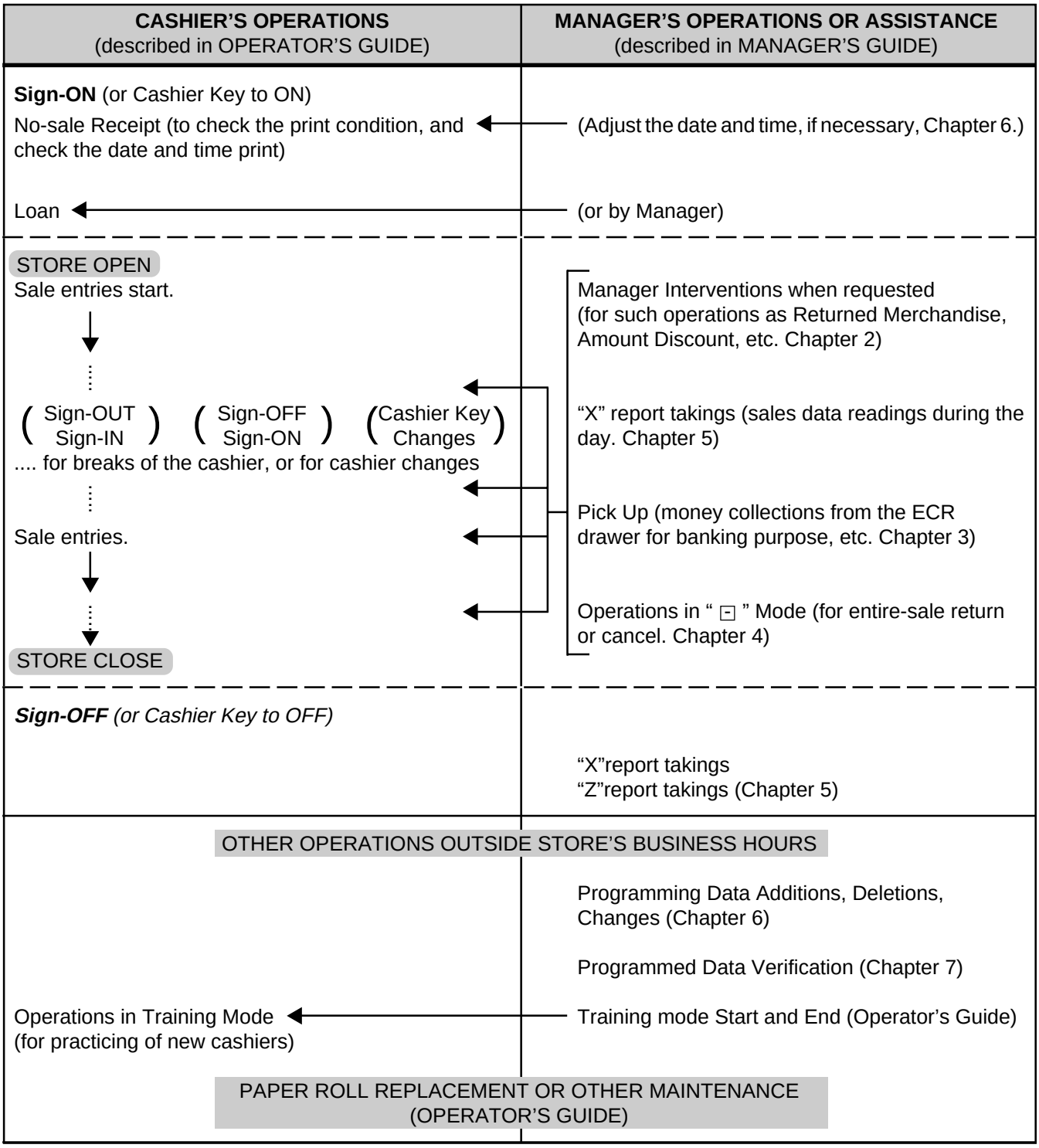
2. STAND-ALONE LEVEL MANAGER'S GUIDE

TABLE OF CONTENTS

Page

1. DAILY OPERATION FLOW

The following shows the typical flow of daily operations on the ECR.



2. MANAGER INTERVENTION

2.1 ITEMS PROGRAMMED TO REQUIRE MANAGER INTERVENTIONS

During daily sale entry operations, the cashier may call for Manager Interventions. The following is the operation flow of a Manager Intervention.

1) During operations, the cashier comes across an item that requires a Manager Intervention. The cashier, already informed of it, may immediately call for a Manager Intervention. Or the cashier, without knowing of it, attempts the operation, and error results with Error Message “MANAGER REQUIRED” (programmable) displayed, clears the error by the **[C]** key, and then calls for a Manager Intervention.

2) The manager goes to the cashier counter with the **MGR** or **MA** key.

3) The cashier explains what kind of operation is attempted, and removes the **REG** key from the Mode Lock at the **“REG”** position.

4) The manager inserts the **MGR** or **MA** key and turns it to the **“MGR”** position.

5) The cashier operates the required item.

6) The manager returns the **MGR** or **MA** key to the **“REG”** position and pulls it out.

7) The cashier sets the **REG** key to the **“REG”** position again and continues registering operations.

The following is the table of the keys and operations that are programmable with Manager Intervention. Fill in the table by marking in the “Not Required” or “Required” column of each item, referring to the documents, etc. listed in the table.

KEYS/OPERATIONS AND MANAGER INTERVENTION STATUS TABLE

KEY	Manager Intervention		Reference
	Not required	Required	
[DOLL DISC]			As for changing the key status, ask your TOSHIBA TEC representative.
[VND CPN]			
[STR CPN]			
[BTL RTN]			
[%-] (or **[% II]**)			
[RTN MDSE]			
[VOID]			
[PO]			
[PB-] or **[CODE OPEN]**			
[EX]			
[NS]			
[ALL VOID]			
Credit Balance *(**NOTE** 1 below)*			These are program options for each store. Ask your TOSHIBA TEC representative for information and these status changes.
Negative-balance Sale Finalization by Media Keys except **[AT/TL]** and **[FSTL TEND]** *(**NOTE** 2)*			
Negative Department or negative PLU Entries *(**NOTE** 3)*			
PLU Price Read			

NOTES:

1. *The "Credit Balance" means that amount entries through **[DOLL DISC]**, **[VOID]**, **[VND CPN]**, **[STR CPN]**, **[BTL RTN]** will result in over-subtraction of the subtotal amount at the time of the entry through any of those keys. If the status "Not required" is selected, over-subtraction using these keys will be allowed in the "REG" mode. The **[RTN MDSE]** key, negative departments, and negative PLUs are not subject to this "Credit Balance" status selection.*
2. *The "Negative-balance Sale" may be caused by:*
   1. *Credit Balance if "Not required" is selected as the above Credit Balance status.*
   2. *Amounts entered through the **[RTN MDSE]** key.*
   3. *Amounts entered through negative departments or negative PLUs.*
   4. *Other negative amounts.*
3. *The "Negative DEPTs or PLUs" are the DEPTs/PLUs programmed as negative status, but not normal DEPTs/PLUs through which Store Coupon or Returned Merchandise amounts are entered.*

2.2 OTHER OPERATIONS REQUIRING MANAGER INTERVENTIONS

Listing Capacity or Amount Limit Release

Amount Limits may be programmed on Departments/PLUs, Tender Medias, **[DOLL DISC]**, **[VND CPN]**, **[STR CPN]**, **[BTL RTN]**. These limits are programmed to check an excessively high or low amount entry by cashier's mistake at the earliest stage. Guide your cashiers as in the following procedure:

(1) During sale entries by the cashier, an error occurs with Error Message "OPERATION ERROR" (programmable) is displayed.

↓

(2) The cashier clears the error by the **[C]** key. The cashier confirms the amount and operates the item again.

↓

(3) If the same error occurs again, the cashier attempts to enter the amount using the **[LC OPEN]** or **[OPEN]** key.

↓

(4) If the operation results in an error again, the Amount Limit cannot be solved by the **[LC OPEN]** or **[OPEN]** key.

↓

(5) The cashier calls for Manager Intervention.

The procedure thereafter is the same as Steps 2) to 7) for the ITEMS PROGRAMMED TO REQUIRE MANAGER INTERVENTIONS (Section 2.1).

In need of information of Amount Limits, see the following:

1) Individual Department High and Low Amount Limits (each PLU is restricted by the Amount Limits of its linked department): Ask your TOSHIBA TEC representative.

2) Departments Common High and Low Amount Limits, and High Amount Limits of Tender Media keys:
Chapter 7: VERIFICATION OF PROGRAMMED DATA
- FUNCTION KEYS AMOUNT LIMIT READ

3) High Amount Limits for **[DOLL DISC]**, **[VND CPN]**, **[STR CPN]**, and **[BTL RTN]** keys:
Chapter 7: VERIFICATION OF PROGRAMMED DATA
- NEGATIVE AMOUNT KEY AMOUNT LIMIT READ

4) For setting or changing the current Amount Limits, see the following:
Chapter 6: PROGRAMMING OPERATIONS
- AMOUNT LIMIT SETTING FOR FUNCTION KEYS (Submode 8)
- NEGATIVE AMOUNT KEY AMOUNT LIMIT SETTING or CHANGING (Submode 35)

3. MANAGER'S OWN OPERATIONS IN "MGR" MODE

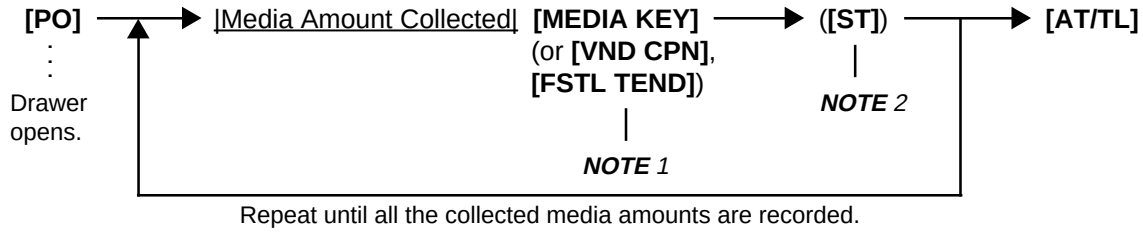
The following are operations possible only in the **"MGR"** position of the Mode Lock, which are performed by the manager or by a person under the manager's control.

3.1 PICK UP OPERATION

This operation is used when you collect money from the ECR drawer, during the day, for the banking purpose, etc. In order to record the money amounts collected and to subtract the amounts from the In-drawer Totals memory, this operation is necessary.

CONDITION — Any time outside a sale, in a Signed-ON condition.

OPERATION — Mode Lock: **MGR**



NOTES:

1. *As for each media and Food Stamp, its in-drawer limit amount can be programmed. On reaching this in-drawer limit when a sale is finalized, the message "DRAWER LIMIT" (programmable) is displayed with an alarm buzzer generated to indicate that a Pick Up operation is necessary.*
2. *Depress the media keys or the **[VND CPN]** or **[FSTL TEND]** key corresponding to the collected media (**[AT/TL]** for cash). The media keys that can be operated here are those programmed to print their media-in-drawer amounts in reports.*
3. *Depress **[ST]**, if necessary, to obtain the subtotal amount of the medias so far collected.*

Pick Up Operation Sample:
The manager comes to the register and collects the cash amount of $300,00 from the drawer:

Mode Lock: **MGR**
(must be in a signed-ON condition)

Depress **[PO]**.
Enter 30000, depress **[AT/TL]**.
Depress **[AT/TL]**.

-- Receipt Print Format --

```
        TEC STORE
     1343 PEACH DRIVE
      PHONE : 87-6437

Open  8:00am to 7:00pm
Closed: every Wednesday

12-19-1994  MON #3001

*  PICK UP  *
CASH            $300.00
TOTAL          $300.00

JONES       0243 18:47TM
```

3.2 ENFORCED SIGN-OFF OF A CASHIER (CODE ENTRY Method)

Each cashier signs-ON to start operations, signs-OUT for leaving the register for a while, signs-IN when comes back, and signs-OFF to end operations (refer to the OPERATOR'S GUIDE). However, when a cashier once signed-ON and then signed-OUT for taking a break does not come back (or the cashier may have operated a sign-OUT by mistake instead of a sign-OFF), the register cannot be operated. No one else can operate sign-OFF, either, because the same cashier must sign-IN first before sign-OFF. In this case, the manager may operate an Enforced Sign-OFF.

CONDITION In a Signed-OUT condition

OPERATION Mode Lock: **MGR**

The 2-digit Cashier Code (manager-assign portion) **[LOG/RECEIPT]** (or **[LOG]**) ..... The same will result as the normal sign-OFF.
01 to 99

The 2-digit code assigned to each cashier. As for the code opening and assigned cashier names, refer to the following:

For verifying the code and the assigned cashier's name:
Chapter 7: VERIFICATION OF PROGRAMMED DATA
- CASHIER CODE AND NAME READ

For programming or changing the cashier's names or assigned codes:
Chapter 6: PROGRAMMING OPERATIONS
- CASHIER CODE AND NAME PROGRAMMING (Submode 2)

-- Receipt Print Format --

```
      TEC STORE
    1343 PEACH DRIVE
     PHONE : 87-6437

Open  8:00am to 7:00pm
Closed: every Wednesday

12-19-1994  MON #3001

*  SIGN OFF  *

JONES       0250 18:51TM
```

4. OPERATIONS IN " ⊟ " MODE

Instead of using the **[RTN MDSE]** or **[VOID]** key in the "REG" or "MGR" mode for deleting individual items, the " ⊟ " mode automatically processes positive items into negative and negative into positive. To operate, turn the Mode Lock to the " ⊟ " position using the MA key, and enter the items, one by one, just as in the "REG" mode, as reading the sale receipt (issued at the time of the purchase) or tracing the returned items as if in the "REG" mode. A positive balance resulted in the " ⊟ " mode indicates the amount to be paid back to the customer.
The " ⊟ " mode operation may occur from time to time during day, on the cashier's request, just as in the case of ordinary Manager Interventions, when a customer comes to the cashier counter to return or cancel all the items that he once purchased. In using this mode, please be certain to read the following three cases of operation patterns. If you only turn the Mode Lock to the " ⊟ " position and let the cashier operate the actual item entries in this mode, you should also inform the cashier of these three cases.

4.1 ORDINARY OPERATIONS IN " ⊟ " MODE

Except those described in the next sections 4.2 and 4.3, all the sale items that were entered in "REG" or "MGR" at the time of purchase may be entered in the " ⊟ " mode in the same way as operated at the time of purchase.

OPERATION AND RECEIPT SAMPLE

RECEIPT ISSUED IN "REG" or "MGR" MODE

```
TEC STORE
1343 PEACH DRIVE
PHONE : 87-6437

Open  8:00am to 7:00pm
Closed: every Wednesday

12-19-1994  MON #3001

VEGETABLE          $2.50TF
Cheese-Half Pck    $2.50TF
%-
    5%              -0.13T
TAX                 $0.30
CASH               $5.17

ITEM  2
JONES        0252 18:51TM
```

These two receipts contain the same sale items and media finalization. The operations are also the same except the Mode Lock position.

The cashier merely follows the purchase receipt (on the left) and enters the same items in the ⊟ position, finalizing with the same media in case a customer has returned or canceled the entire sale after the cashier had finalized that sale.

The ⊟ mode header (∗REG-∗ in this example) is printed at the top and the bottom of the sale contents in the ⊟ mode receipt.

RECEIPT ISSUED IN " ⊟ " MODE

```
TEC STORE
1343 PEACH DRIVE
PHONE : 87-6437

Open  8:00am to 7:00pm
Closed: every Wednesday

12-19-1994  MON #3001

* REG-              *
VEGETABLE          $2.50TF
Cheese-Half Pck    $2.50TF
%-
    5%              -0.13T
TAX                 $0.30
CASH               $5.17

ITEM  2
* REG-              *
JONES        0253 18:53TM
```

NOTE: *When you handle a sales item of cigarette or alcoholic beverage in the " ⊟ " mode, the age confirmation is unnecessary.*

4.2 CHARGE POSTING WITH CUSTOMER FILE (CHECK TRACK MEMORY) IN " ⊟ " MODE

When your register adopts the Customer File Memory type (instead of the PB Manual Entry type), the previous balance entry is different from that operated in the "REG" or "MGR" mode. Due to the memory process, this special operation is required. In case a customer cancels the entire sale once purchased in the charge posting mode, please be certain to operate as instructed on next page.

(1) Operation in "REG" or "MGR" mode (at the purchase; refer to the OPERATOR'S GUIDE.)

|Customer File Code*| **[PICK UP BAL]** (or **[CODE OPEN]**)

: **

The previous balance is recalled from the customer's file memory.

→ Entries of the purchased items*** (if any) → (**[TXBL TL]**) → **[Chg]**

**** → **[TRF]** ..... to transfer all balance with no payment

**** → |Payment Amount| **[R/A]** → Finalization with Media Keys

(2) Operation in " ⊡ " mode (at the cancel or return of the above sale)

|Customer File Code| **[PICK UP BAL]** → |Previous Balance| **[AMT]**

: Equivalent to *

: Equivalent to **

→ Entries of the returned items (equivalent to ***) → **[Chg]**

→ Balance Transfer or Payment operation (equivalent to ****)

NOTE: *Only the previous balance that was automatically recalled from memory in the "REG" or "MGR" mode must be entered manually through the **[AMT]** key in the " ⊡ " mode. Other operations are identical to those operated in the "REG" or "MGR" mode. (Such items as %+ and %- are also operated the same as entered at the time of purchase.)*

RECEIPT AT PURCHASE

Mode Lock: REG or MGR

3 (Cus. File Code) **[PICK UP BAL]**

600 **[DEPT 1]**

10 **[%-]**

(A) **[Chg]**

[TRF]

```
12-19-1994  MON #3001

PB+     000000000003
KAREN WALTERS     $6.42
VEGETABLE         $6.00TF
%-
   10%            -0.60
TAX               $0.36
Chg             $12.18

NEW BAL         $12.18

ITEM  1
```

RECEIPT AT RETURN

Mode Lock: ⊡

3 (Cus.File Code) **[PICK UP BAL]** 642 **[AMT]**

Operated exactly the same as the sequence marked with "(A)" at purchase.

The final new balance after correction in this operation (which should be equal to the balance called at the starting of the RECEIPT AT PURCHASE).

```
12-19-1994  MON #3001

*   REG-          *
PB+     000000000003
KAREN WALTERS     $6.42
VEGETABLE         $6.00TF
%-
   10%            -0.60
TAX               $0.36
Chg             $12.18

NEW BAL         $12.18

NEW BAL          $6.42

ITEM  1
*   REG-          *

SMITH        0223 16:51TM
```

As shown in the sample above, the previous balance $6.42 is entered manually through the **[AMT]** key on the right-hand side receipt, while the same previous balance is automatically recalled by merely designating the Customer File Code through the **[PICK UP BAL]** key on the left-hand side receipt.

The print formats in both receipts are designed to be the same from Customer File Code down to the first "NEW BAL" amount (resulting balance at the time of purchase.), except that the final new balance at the time of return is additionally printed (which will be the same amount of the balance before the purchase) and the " ⊡ " mode header is printed on the right-hand side receipt.

4.3 SCALE ITEM ENTRY IN " ⊡ " MODE

Any scale item entered in the "REG" or "MGR" mode at the time of purchase must be entered manually (Manual Scale Entry but not Auto Scale) in the " ⊡ " mode at the time of return or cancel.
That is, for entering a scale item (once purchased) in the " ⊡ " mode, you must read the written net weight on the item (if any) or read the net weight in the scale display panel by placing it on the scale platter, then enter the net weight value, manually in the procedure described as MANUAL SCALE ENTRY operation in the OPERATOR'S GUIDE.

4.4 PROHIBITIVE OPERATIONS IN " ⊡ " MODE

- NO-SALE (**[NS]**)
- AUTO-SCALE (described in 4.3.)
- NO-SALE CASHING OF CHEQUE OR OTHER NON-CASH MEDIAS
- NO-SALE EXCHANGE from Foreign Currency to Domestic Currency, or vice versa
- LOAN
- PICK UP
- TRAINING MODE START/END
- VALIDATION PRINT
- ENDORSEMENT PRINT
- RECEIPT POST-ISSUE (**[RECEIPT ISSUE]**)

4.5 MANAGER INTERVENTION REQUIRED STATUS OR AMOUNT LIMIT IN " ⊡ " MODE

Since operations in the " ⊡ " mode are performed under the manager's control, the status requiring a Manager Intervention, and Amount Limits (described in Chapter 2) will all be released, i.e., the same handling as in the "MGR" mode.

5. READ (X) AND RESET (Z) REPORTS

The following table shows the key operation to take each report. The “X” and “Z” reports have exactly the same print content if both are available, except that:

1. The “X” reports allow to read the sales data but not clear memories, while the “Z” reports allow to read the sales data and at the same time all the resettable memories will be cleared when the reports have been issued.

2. The symbol “X...” is printed on the top line of a Daily Read Report, “Z...” on a Daily Reset Report, “GTX...” on a GT Read Report, and “GTZ...” on a GT Reset Report, as initial settings.

3. A reset count is printed on the bottom of a “Z” report only.

WARNING!
When opening the cash drawer, be careful not to let the drawer hit any person.

TABLE OF OPERATIONS FOR X AND Z REPORTS

Daily Reports

Report Name	Mode Lock	Key Operation	SAMPLE PAGE
FINANCIAL READ AND RESET • Financial Read • Financial Reset	X Z	3 **[AT/TL]** (Drawer opens.)	5-5
CASHIER READ AND RESET • All Cashier Read • All Cashier Reset	X Z	4 **[AT/TL]** (Drawer opens.)	5-7
• Individual Cashier Read • Individual Cashier Reset	X Z	*Code Entry Method:* 4 **[#]** ⌊Cashier ID Code⌋ **[AT/TL]** (2-digit manager-assign code) *Cashier Key Method:* Set the required Cashier Key (or depress the required Cashier Key), then 4 **[#] [AT/TL]**	
SALESPERSON READ AND RESET • All Salesperson Read • All Salesperson Reset	X Z	5 **[AT/TL]**	5-8
CREDIT CARD COMPANY SALES READ AND RESET • Credit Card Company Sales Read • Credit Card Company Sales Reset	X Z	6 **[AT/TL]**	5-8
DEPARTMENT GROUP READ	X	8 **[AT/TL]**	5-9
MEDIA SALES AND IN-DRWER TOTAL READ	X	9 **[AT/TL]** (Drawer opens.)	5-10
HOURLY RANGE READ AND RESET • Hourly Read • Hourly Reset	X Z	10 **[AT/TL]**	5-10

Daily Reports *(Continued)*

Report Name	Mode Lock	Key Operation	SAMPLE PAGE
DEPARTMENT READ AND RESET			5-11
• Individual Department Read	X	11 **[#]**, then depress the required Dept. Keys (or use **[DP#]** key), one by one, **[ST]** may be used to obtain subtotal, **[AT/TL]** to end.	
• All department Read	X	11 **[AT/TL]**	
• All department Reset	Z		
ALL MEDIA SALES TOTAL AND CASH-IN-DRAWER READ	X	12 **[AT/TL]** (Drawer opens.)	5-8
PLU READ AND RESET			5-13
• Individual PLU Read	X	13 **[#]** (* |PLU Code| **[PLU]**) (**[ST]**) Repeatable **[AT/TL]** * (May be replaced by **[PLU Preset-code Key]**)	
• Zone PLU Read	X	13 **[#]** |Zone-start PLU Code| **[@/FOR]** |Zone-end PLU Code| **[AT/TL]**	
• Zone PLU Reset	Z		
• All PLU Read	X	13 **[AT/TL]**	
• All PLU Reset	Z		
• Inactive PLU Read	X	13 **[#]** 0 **[AT/TL]**	
CUSTOMER FILE READ AND RESET (for Check Track Memory type only)			5-15
• All Files Read	X	15 **[AT/TL]**	
• All Files Reset	Z		
• Individual File Read	X	15 **[#]** |Customer File Code| **[@/FOR]** **[AT/TL]**	
• Zone Files Read	X	15 **[#]** |Zone-start File Code| **[@/FOR]** → |Zone-end File Code| **[AT/TL]**	
• Zone Files Reset	Z		
• Zero-balance Files Read	X	15 **[#]** 0 **[AT/TL]**	
• Credit-balance Files Read	X	15 **[#]** 1 **[AT/TL]**	
• Debit-balance Files Read	X	15 **[#]** 2 **[AT/TL]**	
PLU GROUP SALES READ AND RESET			5-17
• PLU Group Sales Read	X	24 **[AT/TL]**	
• PLU Group Sales Reset	Z		

GT Reports -- to be taken on weekly or monthly basis --

Report Name	Mode Lock	Key Operation	SAMPLE PAGE
(The Mode Lock position is the same as the corresponding Daily report. However, always add 200 to the numeric value for the report taking.)			
FINANCIAL GT READ AND RESET • Financial GT Read • Financial GT Reset	 X Z	 203 **[AT/TL]** (Drawer opens.)	5-17
CASHIER GT READ AND RESET • All Cashier GT Read • All Cashier GT Reset • Individual Cashier GT Read • Individual Cashier GT Reset	 X Z X Z	 204 **[AT/TL]** (Drawer opens.) *Code Entry Method:* 204 **[#]** |Cashier ID Code| **[AT/TL]** (2-digit manager-assign code) *Cashier Key Method:* Set the required Cashier Key (or depress the required Cashier Key), then 204 **[#]** **[AT/TL]**	5-17
CREDIT CARD COMPANY SALES GT READ AND RESET • Credit Card Company Sales GT Read • Credit Card Company Sales GT Reset	 X Z	 206 **[AT/TL]**	5-17
DEPARTMENT GROUP GT READ	X	208 **[AT/TL]**	5-17
DEPARTMENT GT READ AND RESET • Individual Department GT Read • All Department GT Read • All Department GT Reset	X X Z	211 **[#]**, then depress the required Dept. Keys (or use **[DP#]** key), one by one, **[ST]** may be used to obtain subtotal, **[AT/TL]** to end. 211 **[AT/TL]**	
PLU READ AND RESET • Individual PLU GT Read • Zone PLU GT Read • Zone PLU GT Reset • All PLU GT Read • All PLU GT Reset • Inactive PLU GT Read	X X Z X Z X	213 **[#]** |PLU Code| **[PLU]** (**[ST]**) (*) Repeatable **[AT/TL]** * (May be replaced by **[PLU Preset-code Key]**) 213 **[#]** |Zone-start PLU Code| **[@/FOR]** |Zone-end PLU Code| **[AT/TL]** 213 **[AT/TL]** 213 **[#]** 0 **[AT/TL]**	5-17
PLU GROUP SALES GT READ AND RESET • PLU Group Sales GT Read • PLU Group Sales GT Reset	 X Z	 224 **[AT/TL]**	5-17

5.1 Combination Reports

Multiple reports can be programmed to be issued in one operation sequence. The following are reports programmable for combinations (max. 5 reports in one table, max. 3 tables). Ask your TOSHIBA TEC representative for information of the contents of your Combination Report Tables or for changes.

REPORT NAME	AVAILABLE REPORTS			
Financial Report	X	Z	GTX	GTZ
All Cashier Report	X	Z	GTX	GTZ
All Salesperson Report	X	Z		
Credit Company Sales Report	X	Z	GTX	GTZ
Department Group Report	X		GTX	
Media Sales and In-drawer Report	X			
Hourly Range Report	X	Z		
All Department Report	X	Z	GTX	GTZ
All Media Sales & Cash-in-drawer Report	X			
All PLU Report	X	Z	GTX	GTZ
All Customer Files Report	X			
PLU Group Sales Report	X	Z	GTX	GTZ

KEY OPERATION: Mode Lock: **X** for Read
Z for Reset
→ **[AT/TL]**

Enter the Report Combination-ID No.:
None (simply depress **[AT/TL]**): Daily Combination Report Table No.1
200: GT Combination Report Table No.1
1: Daily Combination Report Table No.2
201: GT Combination Report Table No.2
2: Daily Combination Report Table No.3
202: GT Combination Report Table No.3

NOTES:
1. *When the mode set for taking combination reports does not match the mode of a report contained in the table, that report will be skipped.*
2. *If no combination reports data have been programmed, Combination Report Table No. 1 (which is issued by depressing the **[AT/TL]** key alone for Daily Reports and depressing 200 **[AT/TL]** for GT Reports) is auto-preset with All Department Report and Financial Report. It will be active as Table No. 1 content unless no data are programmed for Table No. 1.*
3. *The report output order is determined by the order programmed in each table.*
4. *The drawer will open when a contained report is ruled to open the drawer.*

5.2 GENERAL NOTES ON REPORT TAKINGS

1. The cashier signed-OFF or signed-OUT condition is required for taking any Z reports in the Code Entry Method. (Otherwise, an error will result when the Mode Lock is turned to the “X” or “Z” position.) However, in case of a standalone system with PC connected and CVS spec. selected, X/Z reports can be taken during sign-ON and sales entries.

2. Reset reports will be printed on the receipt roll as well as on journal, and issued, regardless of the current Receipt-ON/OFF status.

3. The **[ITEM CORR]** (or **[VOID]**) key may be depressed halfway during printing a report, for the purpose to abort the receipt issuance (except for some short reports). When a report-abort has been operated for a reset report, the memory of the report data will not be cleared.

4. The drawer will open at the starting of printing the reports which are stated with "(Drawer opens)" in the Daily and GT report table. However, the drawer may remain closed if so selected by a program option. This selection is applied only to the Financial Report.

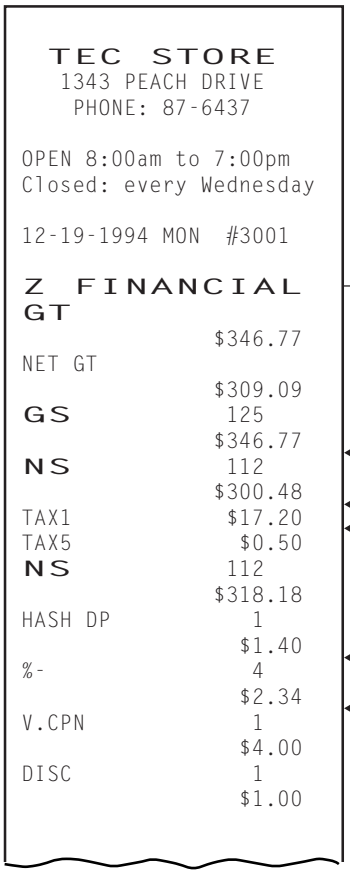
5. The sales data of the following read reports will be cleared when the relevant reset reports are cleared. If those read reports are necessary, please be certain to take them before the relevant reset reports are taken:

READ REPORT (with no reset reports provided)	RELEVANT RESET REPORT that clears the read report data
Department Group Read	All Department Reset
Media Sales and In-drawer Total Read	Financial Reset
All Media Sales Total and Cash-in-drawer Read	Financial Reset
Customer File Read ... *non-resettable*	
Inactive PLU Read	PLU Reset
Department Group GT Read	All Department GT Reset
Inactive PLU GT Read	PLU GT Reset

6. The PLU with the Delete Status set in each PLU report is not printed/searched.

As you notice, "Financial Reset", "All Department Reset", and "PLU Reset" reports should be taken after all other reports (particularly read reports) on the respective levels of daily and GT, so that the required read reports data may not be cleared by those reset report takings.

FINANCIAL READ or RESET (Daily or GT)



Mode Lock: **X** for read Enter 3, depress **[AT/TL]** (for Daily)
Z for reset Enter 203, depress **[AT/TL]** (for GT)

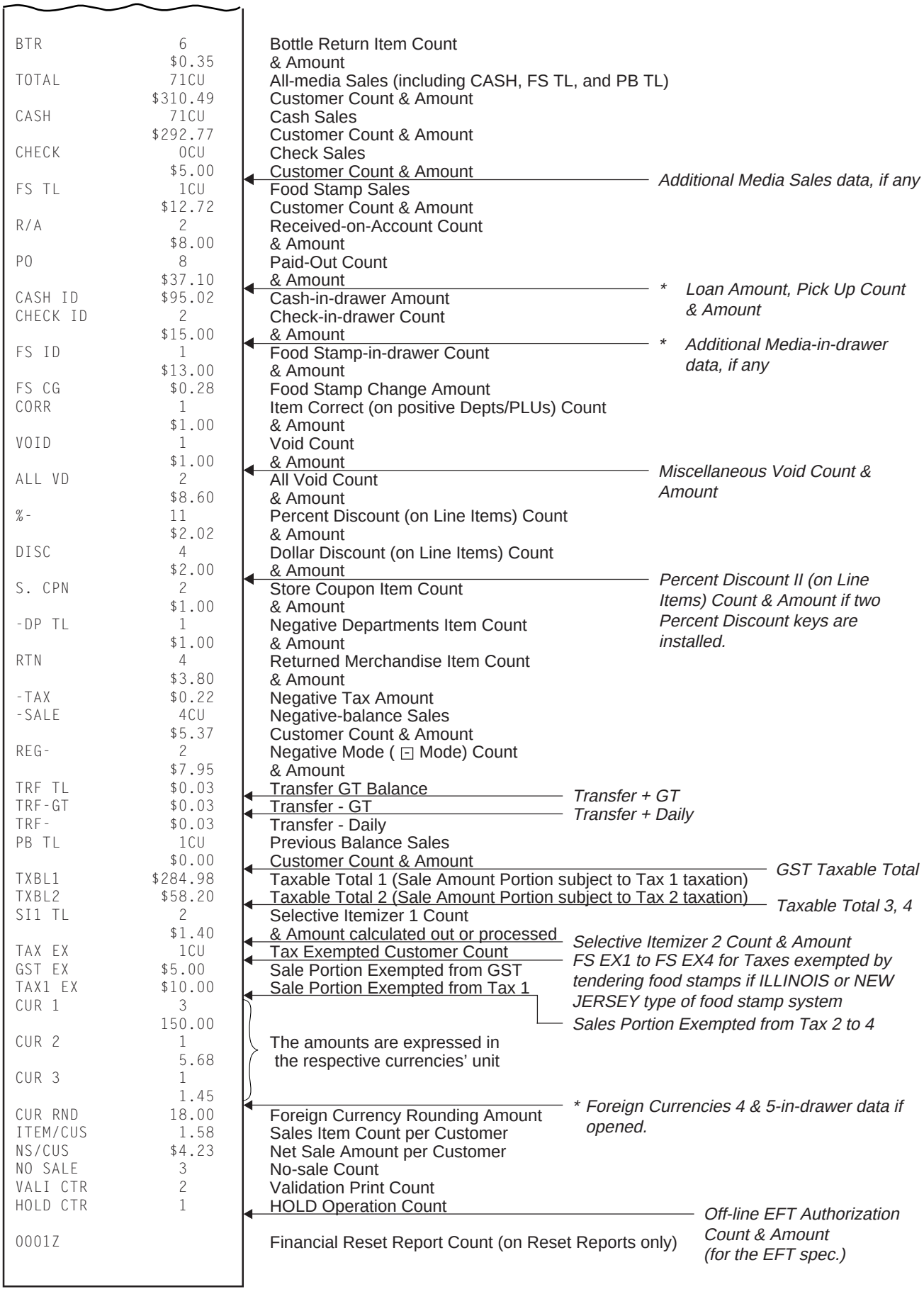
Reset Report Format Sample

NOTES:
1. *The numeric values placed in reports in this manual are merely examples to show the print format and may not balance correctly.*
2. *The items attached with "*" outside the receipt frame are printed only on Daily Reports but not on GT Reports.*
3. *The print or non-print status of each item on Financial Reports can be programmed.*
4. *Non-printing of items with zero sales (i.e.,zero skip) can be programmed by a program option.*

Date, Day-of Week, Store/Register No.
Report Name
Grand Total (non-resettable)
Net GT (non-resettable)
Gross Sale Item Count & Amount
Net Sale Without Tax Item Count & Amount — *Percent Charge I, II Count & Amount*
Tax 1 Amount — *GST Amount*
Manual Tax Amount — *Tax 2 to 4 Amount*
Net Sale With Tax Item Count & Amount
Total of Positive Departments programmed as OTHER INCOME, Item Count & Amount
Percent Discount (on Subtotal) Count & Amount — *Total of Negative Departments programmed as OTHER INCOME, Item Count & Amount*
Vendor Coupon Count & Amount
Dollar Discount (on Subtotal) Count & Amount — *Percent Discount II (on Subtotal) Count & Amount if two Percent Discount keys are installed.*

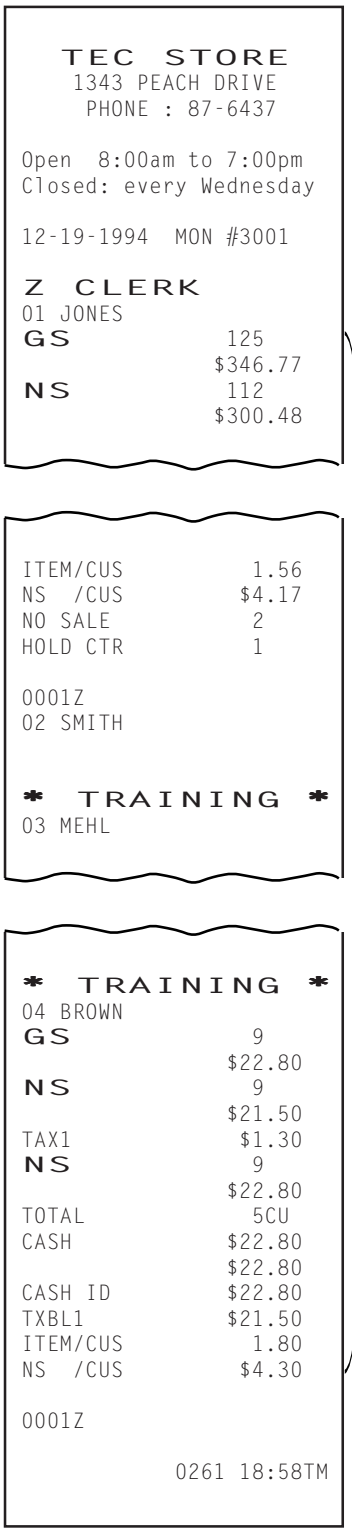
-- To be continued --

(Financial Read or Reset)
-- Continued --



CASHIER READ or RESET (Daily or GT)

Reset Report Format Sample



```
TEC STORE
1343 PEACH DRIVE
PHONE : 87-6437

Open  8:00am to 7:00pm
Closed: every Wednesday

12-19-1994  MON #3001

Z CLERK
01 JONES
GS              125
                $346.77
NS              112
                $300.48

ITEM/CUS          1.56
NS  /CUS         $4.17
NO SALE           2
HOLD CTR          1

0001Z
02 SMITH

*  TRAINING  *
03 MEHL

*  TRAINING  *
04 BROWN
GS                9
                $22.80
NS                9
                $21.50
TAX1             $1.30
NS                9
                $22.80
TOTAL             5CU
CASH            $22.80
                $22.80
CASH ID         $22.80
TXBL1           $21.50
ITEM/CUS          1.80
NS  /CUS         $4.30

0001Z

            0261 18:58TM
```

Mode Lock: **X** for read
Z for reset

(1) All Cashiers:
Enter 4, depress **[AT/TL]** (for Daily).
Enter 204, depress **[AT/TL]** (for GT).

(2) Individual Cashier:
Enter 4, depress **[#]**, enter the Cashier ID Code (2 digits), and depress **[AT/TL]** (CODE ENTRY Method) (for Daily)

Set the required Cashier Key to ON, enter 4, depress **[#]** and **[AT/TL]** (CASHIER KEY Method) (for Daily)
Enter 204, depress **[#]**, enter the Cashier ID Code (2 digits), and depress **[AT/TL]** (CODE ENTRY Method) (for GT)

Set the required Cashier Key to ON, enter 204, depress **[#]** and **[AT/TL]** (CASHIER KEY Method) (for GT)

In CASHIER SIGNING Method, the ID code here is the 2-digit manager-assign portion of the Cashier Code

Cashier ID Code & Cashier's Name

Same contents as Financial Reports except for GT and NET GT

Individual Cashier Reset Report Count (on Reset Reports only)

DAILY SALESPERSON READ OR RESET

(all Salespersons)

Reset Report Sample

Mode Lock: **X** for read / **Z** for reset — Enter 5, depress **[AT/TL]**

```
        TEC  STORE
     1343 PEACH DRIVE
      PHONE : 87-6437

Open  8:00am to 7:00pm
Closed: every Wednesday

12-19-1994  MON #3001

Z  SLSPERSON
02 Stacy
GS              2
              $2.65
NS              2
              $2.50
NS              2
              $2.65
RTN             0
              $0.00

0001Z

            0267 19:00TM
```

Person Code, Name
Gross Sale Item Count & Amount
Net Sale Without Tax Item Count & Amount
Net Sale With Tax Item Count & Amount
Returned Item Count & Amount

All Salesperson Reset Report Count (on Reset Reports only)

CREDIT CARD COMPANY SALES READ OR RESET (Daily or GT)

Reset Report Sample

Mode Lock: **X** for read / **Z** for reset — Enter 6, depress **[AT/TL]** (for Daily)
Enter 206, depress **[AT/TL]** (for GT)

```
        TEC  STORE
     1343 PEACH DRIVE
      PHONE : 87-6437

Open  8:00am to 7:00pm
Closed: every Wednesday

12-19-1994  MON #3001

Z  CREDIT
01 ABC          1
              $5.30
TOTAL           1
              $5.30

0001Z

            0268 19:00TM
```

Company Code, Name, Count & Sales Amount

Total of all card companies' sales (Item Count & Amount)
Credit Card Co.Sales Reset Report Count (on Reset Reports only)

DAILY ALL MEDIA SALES TOTAL AND CASH-IN-DRAWER READ

(read only)

Mode Lock: **X**, enter 12, depress **[AT/TL]**

```
        TEC  STORE
     1343 PEACH DRIVE
      PHONE : 87-6437

Open  8:00am to 7:00pm
Closed: every Wednesday

12-19-1994  MON #3001

X  MEDIA
TOTAL          26CU
             $252.23
CASH ID         $20.02

            0268 19:01TM
```

All Media Sales Total Customer Count, Amount
Cash-in-drawer Amount

DEPARTMENT GROUP READ (Daily or GT)

(read only)

Mode Lock: **X**

Enter 8, depress **[AT/TL]** (for Daily).
Enter 208, depress **[AT/TL]** (for GT).

```
      TEC  STORE
    1343 PEACH DRIVE
     PHONE : 87-6437

Open  8:00am to 7:00pm
Closed: every Wednesday

12-19-1994  MON #3001

X  GROUP
VE&FR          41
46,51%       $153.20
ME&FI          11
 9,17%        $30.19
DAIRY          20
12,41%       $40.89
BAKERY         11
15,28%       $49.24
CA&BT          15
14,06%       $46.30
DR&BL          14
 6,59%        $21.70
SN&SP           2
 6,07%        $20.00
OTHERS          2
 1,06%         $3.50

TOTAL          125
              $329.38

FRESH          83
72.22%       $237.88
MANUF          40
26,72%       $88.00
OTHER           2
 1.06%         $3.50

TOTAL          125
              $329.38

           0270 19:01TM
```

Minor Groups:
Group Name, Item Count
Sales Percentage & Amount

Item Count / Amount } Total of all Minor Groups

Major Groups:

Item Count / Amount } Total of all Major Groups

DAILY MEDIA SALES AND IN-DRAWER TOTAL READ

(read only)

Mode Lock: **X**, enter 9, depress **[AT/TL]**

```
        TEC STORE
     1343 PEACH DRIVE
      PHONE : 87-6437

Open  8:00am to 7:00pm
Closed: every Wednesday

12-19-1994  MON #3001

X MEDIA ALL
TOTAL            26CU
                $252.23
CASH             17CU
                $128.57
CHECK             3CU
                 $23.40
Chg               5CU
                 $73.36
FS TL             1CU
                 $12.72
CASH ID          $20.02
CHECK ID           5
                 $37.00
Chg ID             1
                  $5.30
FS ID              1
                 $13.00
FS CG             $0.28
PB TL              1CU
                 $10.90
CUR1               1
                 100.00
CUR2               2
                 110.00
CUR3               1
                  80.00

             0271 19:01TM
```

All Media Sales Customer Count & Amount

Each Media Sales Cus, Count & Amount

Each Media-in-drawer Count & Amount

Food Stamp Change
Previous Balance Sales Cus. Count & Amount
Each Foreign Currency-in-drawer Count & Amount

DAILY HOURLY RANGE READ or RESET

Reset Report Sample

Mode Lock: **X** for read, **Z** for reset — Enter 10, depress **[AT/TL]**

```
        TEC STORE
     1343 PEACH DRIVE
      PHONE : 87-6437

Open  8:00am to 7:00pm
Closed: every Wednesday

12-19-1994  MON #3001

Z HOURLY
08:00TM
12:00TM
15:00TM          125
  26CU         $252.23
19:00TM

0001Z

             0272 19:01TM
```

8:01 to 12:00
12:01 to 15:00
15:01 to 19:00 Item Count Customer Count & Amount
19:01 and thereafter

Hourly Range Reset Report Count (on Reset Reports only)

DEPARTMENT READ or RESET

Individual Department Read (Daily or GT)

Operation for this sample report:

Mode Lock: **X**
11 **[#]** (for Daily)
211 **[#]** (for GT)

[DEPT: VEGETABLE]

[DEPT: FRUIT]

[ST]

[AT/TL]

```
        TEC STORE
     1343 PEACH DRIVE
      PHONE : 87-6437

Open  8:00am to 7:00pm
Closed: every Wednesday

12-19-1994  MON #3001

X DP INDIV
VEGETABLE
                   32
29,03%           $95.20
DISC                1
                 $0.50
RTN                 0
                 $0.00
S.CPN               0
                 $0.00
CORR                1
                 $1.00
REG-                2
                 $5.00
FRUIT
                   10
17,68%           $58.00
DISC                0
                 $0.00
RTN                 0
                 $0.00
S.CPN               0
                 $0.00
CORR                0
                 $0.00
REG-                0
                 $0.00
SUBTL              42
                $153.20
TOTAL              42
                $153.20

              0273 19:02TM
```

Mode Lock: **X**
Enter 11 and depress **[#]** for Daily Report, or
Enter 211 and depress **[#]** for GT Report
Depress the required Dept Keys (or enter the required Dept Code and depress **[DP#]**), repeat this for other required DEPTs, depress **[ST]** if subtotal is necessary, depress **[AT/TL]** to end reading.

Department Name,
Item Count
Customer Count (or Sales Percentage NOTE), Amount
Dollar Discount or %-
Count & Amount
Return Merchandise Item
Count & Amount
Store Coupon Item
Count & Amount
Item Correct /Void
Count & Amount
Negative Mode
Count & Amount
⋮

The print or non-print status of each item is selected in a programming operation.

Item Count / Amount — Subtotal of VEGETABLE + FRUIT

Item Count / Amount — Total of all departments read in this report

When there is any Negative Department Subtotal value, its Item Count & Amount is printed here.

When there is any Negative Department Total value, its Item Count & Amount is printed here.

NOTE: *A program option allows to select which of Customer Count and Sales Percentage is printed here.*

All Department Read or Reset (Daily or GT)

Reset Report Sample

```
        TEC STORE
     1343 PEACH DRIVE
      PHONE : 87-6437

Open  8:00am to 7:00pm
Closed: every Wednesday

12-19-1994  MON #3001

Z DP ALL
VEGETABLE
                   33
30,30%          $101.20
DISC                1
                 $0.50
RTN                 0
                 $0.00
S.CPN               0
                 $0.00
CORR                1
                 $1.00
REG-                2
                 $5.00
```

Mode Lock: **X** for read, **Z** for reset ┐ Enter 11, depress **[AT/TL]** (for Daily). Enter 211, depress **[AT/TL]** (for GT).

Department Data ↓

Dept. 1 Name
- Item Count
- Customer Count (or Sales %), Amount
- Dollar Disc. or %- Count & Amount
- Returned Merchandise Item Count & Amount
- Store Coupon Count & Amount
- Item Correct/Void Count & Amount
- Negative Mode Count & Amount

⋮

```
DP15
                   1
                 $1.00
DISC                0
                 $0.00
RTN                 0
                 $0.00
S.CPN               0
                 $0.00
CORR                0
                 $0.00
REG-                0
                 $0.00

TOTAL             126
                $333.98
-TOTAL              1
                 $1.00

VE&FR              42
47,47%          $159.20
ME&FI              11
 9,00%           $30.19
DAIRY              20
12,19%           $40.89
BAKERY             11
 4,06%           $13.60
CA&BT              24
12,19%           $40.89
DR&BL              14
 6,47%           $21.70
```

Dept. 15 Data:

Item Count, Amount } of positive departments

Item Count, Amount } of negative departments

Minor Group and Major Group Data ↓

Refer to Department Group Read Report for details.

PLU (PLU SALES DATA) READ or RESET

Individual PLU Read (Daily or GT)

Mode Lock: **X**
Enter 13 **[#]** for Daily Report, or Enter 213 **[#]** for GT Report.
Enter the PLU code, depress **[PLU]**. (Repeat this step if necessary.)
Depress **[ST]** for subtotal.
Depress **[AT/TL]** to end.

```
      TEC  STORE
    1343 PEACH DRIVE
     PHONE : 87-6437

Open  8:00am to 7:00pm
Closed: every Wednesday

12-19-1994  MON #3001

X  PLU  INDIV
020102
Lemon
    1            $1.00
020105
Apple
    0            $0.00
SUBTL             1
                 $1.00

TOTAL             1
                 $1.00

             0297 19:13TM
```

OPERATION FOR THIS SAMPLE REPORT:

Mode Lock: **X**
13 **[#]**

20102 **[PLU]**

20105 **[PLU]**

[ST] to obtain subtotal of the above two PLUs.

[AT/TL] to end

Zone PLU Read or Reset (Daily or GT)

Mode Lock: **X** or **Z**
Enter 13 **[#]** for Daily Report, or Enter 213 **[#]** for GT Report.
Enter the zone-start PLU code, depress **[X]**.
Then enter the zone-end PLU code, depress **[AT/TL]**.

```
      TEC  STORE
    1343 PEACH DRIVE
     PHONE : 87-6437

Open  8:00am to 7:00pm
Closed: every Wednesday

12-19-1994  MON #3001

X  PLU  ZONE
     100000~199999
101301
Small-Btl Depo
    4            $0.20

TOTAL             4
                 $0.20

             0276 19:05TM
```

For this sample

Mode Lock: **X** or **Z**
13 **[#]** (for Daily)
100000 **[X]**
199999 **[AT/TL]**

Zone-start PLU Code ~ Zone-end PLU Code

PLU Code
PLU Name
Item Count, Amount

Item Count, Amount of Total of all PLUs read in this report

NOTES: *In Zone PLU Read Reports:*

- *PLUs of zero sale will be skipped.*
- *PLUs not existing in the PLU Program File memory will not be printed in reports (in any reports).*

All PLU Read or Reset (Daily or GT)

Reset Report Sample

Mode Lock: **X** or **Z**
13 **[AT/TL]** (for Daily), or 213 **[AT/TL]** (for GT)

```
      TEC STORE
    1343 PEACH DRIVE
     PHONE : 87-6437

Open  8:00am to 7:00pm
Closed: every Wednesday

19-12-1994  MON #3001

Z PLU ALL
010101
Tomato
    3             $0.50
020102
Lemon
    1             $1.00
050301
Milk-Large Pack
    1             $1.30
050321
Cheese-Half Pck
   13            $32.50
050322
Egg-6 Pack
    1             $1.50
060404
Half Rolls-4
    1             $0.80
070501
Tuna Can
   12             $4.20
070502
Soup Can
    4             $1.20
080502
Kiwi Jam
    1             $2.20
090601
Coke Small-B
    2             $1.20
10130
Small-Btl Depo
    4             $0.20

TOTAL             43
                 $46.60
0001Z

            0277 19:06TM
```

Prints data in order from lower to larger numbered PLU Code.

PLU Code 10101
Name “Tomato”
Item Count, Amount

⋮

NOTE:
When a scaled item is entered, the item count “1” is processed into the Total Item Count of all the PLUs to be printed at the bottom, regardless of its actual weight volume.

⋮

PLU Code 101301

Total Item Count and Amount of all the PLUs
PLU Reset Report Count (on Reset Reports only)

INACTIVE PLU READ (Daily or GT)

(read only)

Mode Lock: **X**
13 **[#]** (Daily), or 213 **[#]** (GT).

Enter 0 (zero), depress **[AT/TL]**.

```
      TEC STORE
    1343 PEACH DRIVE
     PHONE : 87-6437

Open  8:00am to 7:00pm
Closed: every Wednesday

12-19-1994  MON #3001

Z PLU ZERO
010102
Potato
020101
Orange
020105
Apple
30301
Beef
030302
Pork
030303
Mutton
040201
Salmon
040202
Cod
040203
Shrimp
050302
Milk-Small Pack

            0278 19:06TM
```

PLU Code
Name

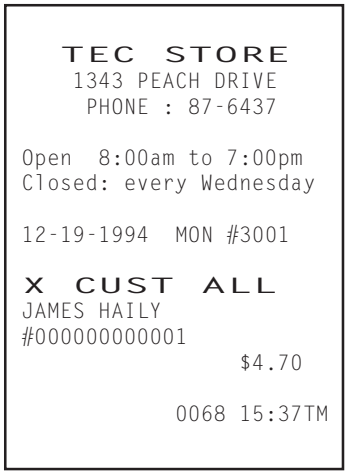
⋮

CUSTOMER FILE READ or RESET

(for Check Track Memory Type only)

All Files (with balance remaining) Read or Reset

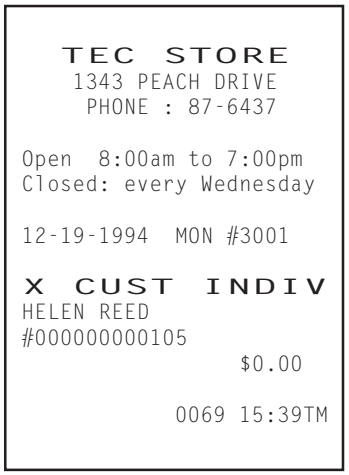
Mode Lock: **X or Z**
Enter 15, depress **[AT/TL]**



Customer's Name
File Code
Balance
(In this case, this is the only file with any balance remaining.)

Individual Files Read

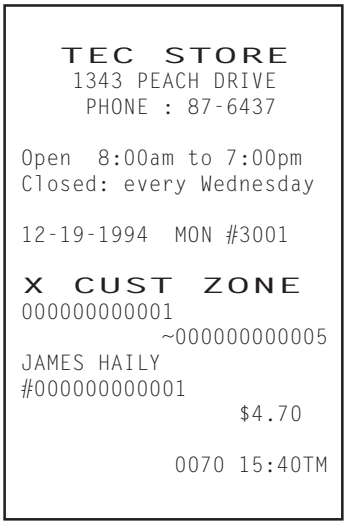
Mode Lock: **X**
Enter 15, depress **[#]**.
Enter the required File Code, depress **[@/FOR]**.
Depress **[AT/TL]** to end.



Customer's Name
File Code
Balance

Zone Files Read or Reset

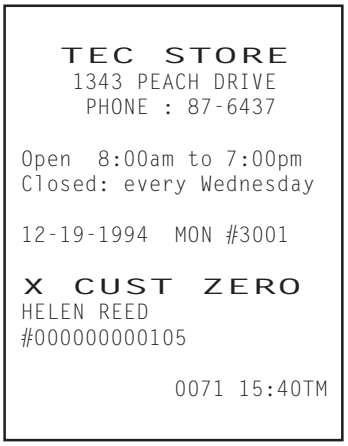
Mode Lock: **X or Z**
Enter 15, depress **[#]**.
Enter the zone-start File Code, depress **[@/FOR]**.
Then enter the zone-end File Code, depress **[AT/TL]**.



Zone-start File Code ~
Zone-end File Code
Customer's Name
File Code
Balance
(In this case, there is only one file with a balance in the designated zone.)

Zero-balance Files Read

Mode Lock: **X**
Enter 15, depress **[#]**.
Enter 0 (zero), depress **[AT/TL]**.



Customer's Name
File Code

Credit-balance Files Read

Mode Lock: **X**
Enter 15, depress **[#]**.
Enter 1, depress **[AT/TL]**.

```
    TEC  STORE
   1343 PEACH DRIVE
    PHONE : 87-6437

Open  8:00am to 7:00pm
Closed: every Wednesday

12-19-1994  MON #3001

X  CUST  CRED
JAMES HAILY
#000000000001
                $4.70

            0072 15:41TM
```

Customer's Name
File Code
Balance

Debit-balance Files Read

Mode Lock: **X**
Enter 15, depress **[#]**.
Enter 2, depress **[AT/TL]**.

```
    TEC  STORE
   1343 PEACH DRIVE
    PHONE : 87-6437

Open  8:00am to 7:00pm
Closed: every Wednesday

12-19-1994  MON #3001

X  CUST  DEBIT

            0073 15:42TM
```

In this case no debit-balance files are found at present.

NOTE: *The program option allows you to select that data concerning the Previous Balance provided to the daily/GT financial memory (TRF TL, TRF + GT, TRF - GT, TRF +, TRF -, PB TL, PB R/A and PB PO) is all reset to zero on taking the All Customer Files Reset report.*

PLU GROUP SALES READ or RESET (Daily or GT)

Reset Report Format Sample

Mode Lock: **X** for read ┐ Enter 24, depress **[AT/TL]** (for Daily)
Z for reset ┘ Enter 224, depress **[AT/TL]** (for GT)

```
      TEC STORE
    1343 PEACH DRIVE
     PHONE : 87-6437

Open  8:00am to 7:00pm
Closed: every Wednesday

12-19-1994  MON #3001

Z PLU GROUP
VEGETABLE
                   4
 3,22%           $1.50
MEAT & DAIRY
                  15
75,75%          $35.30
BAKERY
                   1
 1,72%           $0.80
CAN & BTL FOOD
                  17
16,31%           $7.60
DRINK
                   2
 2,58%           $1.20
BTL DEPO
                   4
 0,43%           $0.20

TOTAL             43
                $46.60
0001Z

              0079 19:07TM
```

PLU Group Name
Item Count
Sales Percentage, Amount
⋮
PLU Group Sales Reset Report Count (on Reset Reports only)

GT REPORTS

The print form and items of a GT report are the same as those of its corresponding daily report, except the report header portion. Please also note that some items provided in the daily report are not provided in its GT reports. The counters and totals in a GT report are records accumulated for a certain period (week, month, etc.) while those counters and totals in the daily report are usually records for a day. The accumulated record data in each GT report will be renewed when its GTZ report has been taken.

Header Example

All Department Read Report (Daily)
All Department GT Read Report

6. PROGRAMMING OPERATIONS

This chapter is provided for the store programmer or the store manager who may have to change the programmed data of the MA-1650 series ECR on the daily, weekly, or monthly basis. Usually, all the basic program data required for your store should be set before delivering the product by your local TOSHIBA TEC representative. However, in need of changing or adding program data, please refer to this chapter. It is also recommended to read the OPERATOR'S GUIDE as well as other chapters of the MANAGER'S GUIDE in order to thoroughly understand the descriptions in this chapter. If there are any unclear points or program data other than listed here must be changed or added, please contact your TOSHIBA TEC representative.

TABLE OF PROGRAMMING OPERATIONS

6.1 BASIC KEY FUNCTIONS AND KEYBOARD VARIATIONS IN PROGRAMMING OPERATIONS

6.1.1 Basic Key Functions

1. The following are main keys and their functions to be used in programming operations:
   [X] or **[@/FOR]**..... Used to enter the program Submode No. The **[X]** Key is usually labeled as **[@/FOR]** on the ECR Keyboard.
   [ST] ..... Used to enter the Address No. or Item Code. Also used to end the item data entries.
   [#]..... Used to enter data for the address or item. Each character code is also entered through this key.
   [AT/TL] ..... Used to end the entire program Submode sequence.

2. Functions of the **[C]** key:
   - When an entered program data is already printed, the **[C]** key cannot clear it any longer. To correct the data, re-enter it.
   - Before the entered data is printed, the data may be cleared by the **[C]** key.

6.1.2 Keyboard Variations in Programming operations

The MA-1650 provides several keyboards for programming operations. Depending on which keyboard is used, the key layout and the character entry method will vary.

Case 1: When the ECR Keyboard is Ordinary Keyboard Type (Stroke-key Type):

1-1 When the Ordinary keyboard alone is used for programming, follow the instructions as they are described in this manual. For character settings, use the CHARACTER CODE TABLES (later stated). None of the DIRECT CHARACTER ENTRY methods are possible.

1-2 When the Programming Keyboard TKB-1 (hardware option) is connected:

1) Character Keys provided on the TKB-1 keyboard may be used to directly enter the characters. (DIRECT CHARACTER ENTRY method). Any characters not provided on the TKB-1 keyboard (and those provided as well) may be entered through the Numeric Keys and the **[#]** key on the ECR keyboard, referring to the CHARACTER CODE TABLE.

2) Basic Function Keys (**[C]**, **[X]**, **[ST]**, **[AT/TL]**) may be depressed either on the TKB-1 or the ECR keyboard. If any other keys not provided on the TKB-1 are required in programming, operate them on the ECR keyboard (such as Department Keys, **[DP#]**, **[PLU]**, etc.).

1-3 When the PLU Keyboard PK-2 (hardware option) is connected:

1) Character Keys provided on the PK-2 Character Setting Sheet may be used to directly enter the characters (DIRECT CHARACTER ENTRY method) . Any characters not provided there (and those provided as well) may be entered, in the CHARACTER CODE ENTRY method, through the Numeric Keys and the **[#]** key on the ECR keyboard.

2) All Function keys (**[C]**, **[X]**, **[ST]**, **[AT/TL]**, **[DP#]**, etc.) must be operated on the ECR keyboard.

3) In the following operations, however, the Character Setting Sheet should be removed and the keys on the PK-2 are used as PLU Preset-code Keys:
   - PLU PRESET-CODE KEY SETTING (Submode 27 in this chapter)

Case 2: When the ECR Keyboard is Flat Keyboard Type:
The Flat keyboard will be set with the "Setting Mode Key Layout" in the programming operations including the character entries. On this keyboard, functions and locations of keys required in various programming operations are fixed. Characters on the key sheet may be entered directly through this keyboard. The Character Code Entry method is also allowed.

The following operations may be executed with the "Setting Mode Key Layout."
- STORE NAME/MESSAGE AND COMMERCIAL MESSAGE PROGRAMMING (Submode 1)
- CASHIER CODE AND NAME PROGRAMMING (Submode 2)
- PLU TABLE PROGRAMMING (Submode 4)
- CUSTOMER FILE CODE (CHECK TRACK NO.) AND NAME SETTING (Submode 15)
- SALESPERSON CODE AND NAME PROGRAMMING (Submode 20)
- DISPLAY MESSAGE PROGRAMMING (Submode 31)

NOTE: *If an option keyboard (TKB-1 or PK-2) is connected, the DIRECT CHARACTER ENTRY method is allowed through both the ECR keyboard and the option keyboard.*

6.2 CHARACTER ENTRIES

As already stated, there are two methods of operations for character settings for names or messages: CHARACTER CODE ENTRY Method and DIRECT CHARACTER ENTRY Method.

CHARACTER CODE ENTRY Method

This method is to set a character by entering a Character Code and depressing the **[#]** key.
This method is allowed in either of Case 1 and Case 2, but is operated only on the ECR keyboard (Ordinary Type or Flat Type).

DIRECT CHARACTER ENTRY Method

This method is to set a character by directly depressing the Character Key on any of the following keyboard:
- Flat Keyboard (ECR Keyboard Flat Type) with "Setting Mode Key Layout" sheet (refer to Case 2)
- TKB-1 Keyboard (Programming Keyboard; hardware option)
- PK-2 Keyboard (PLU Keyboard; hardware option)

By using those character keys, the characters are directly entered. In this manual, sample operations are attached to most of the programming operations. And at name or message programming portions, characters are entered by the CHARACTER CODE ENTRY method. Instead of this, you may depress the Character Keys. For example, instead of entering 401 **[#]** (to enter character "A"), you may simply depress Character Key "A" on any of the above three keyboards.

On the following pages, Character Code Tables under the CHARACTER CODE ENTRY Method and three different keyboards under the DIRECT CHARACTER ENTRY Method are shown. These pages are to be referred to, every time the "Character Entries" sequence is contained in various programming operations in this manual. Read through these pages at least once first, so that you may know the appropriate method of character entries using the ECR keyboard and/or option keyboards.

6.3 Character Code Entry Method

Character Code Table 1: Standard Characters

Column Code →

Row Code ↓

	2	3	4	5	6	7	8	9	10	11	12	13	14	15
00		0	@	P	`	p			▨	á	Å	\		→
01	!	1	A	Q	a	q			°	é	å	II		←
02	"	2	B	R	b	r			⌜	í	Ø	III		↓
03	#	3	C	S	c	s			⌟	ó	ø	II		↑
04	$	4	D	T	d	t			,	ú	Æ	—		1/2
05	%	5	E	U	e	u			•	â	æ	Ð		1/4
06	&	6	F	V	f	v			Ä	ê	Œ	∂		★
07	´	7	G	W	g	w			Ë	î	œ			◇
08	(	8	H	X	h	x			Ö	ô	ß			kg
09	)	9	I	Y	i	y			Ü	û	¢			lb
10	*	:	J	Z	j	z			É	à	£			No
11	+	;	K	[	k	{			ä	è	Φ			x
12	,	<	L	¥	l	|			ë	ì	Σ			▽
13	-	=	M	]	m	}			ï	ç	÷			△
14	.	>	N	^	n	~			ö	Ñ	–			⊡
15	/	?	O	_	o	◪			ü	ñ	‾			

Character Setting Operations:

- To set a regular-sized character, enter the COL (column) code and then the ROW code, followed by the **[#]** key.
  ex.) To set "%", enter 205 and depress **[#]**.
  To set "kg", enter 1508, and depress **[#]**.

- To set a blank instead of a character, simply depress **[#]** without a prior code entry, or enter 200 and depress **[#]**.

- Depress the **[X]** (or **[@/FOR]**) key once prior to a regular-sized character entry, and it will be a double-sized character (a blank will also be double-sized) .
  ex.) To set "**G**ROUP", "**G**" in double-sized, and "ROUP" in regular-sized:

[X] 407 **[#]**	502 **[#]**	415 **[#]**	505 **[#]**	500 **[#]**
G	R	O	U	P

- Depress the **[X]** key twice prior to the first character code entry to set the entire message line or enter name with all double-sized characters.
  ex.) To set "**GROUP**"all in double-sized:

[X] [X]	407 **[#]**	502 **[#]**	415 **[#]**	505 **[#]**	500 **[#]**
	G	**R**	**O**	**U**	**P**

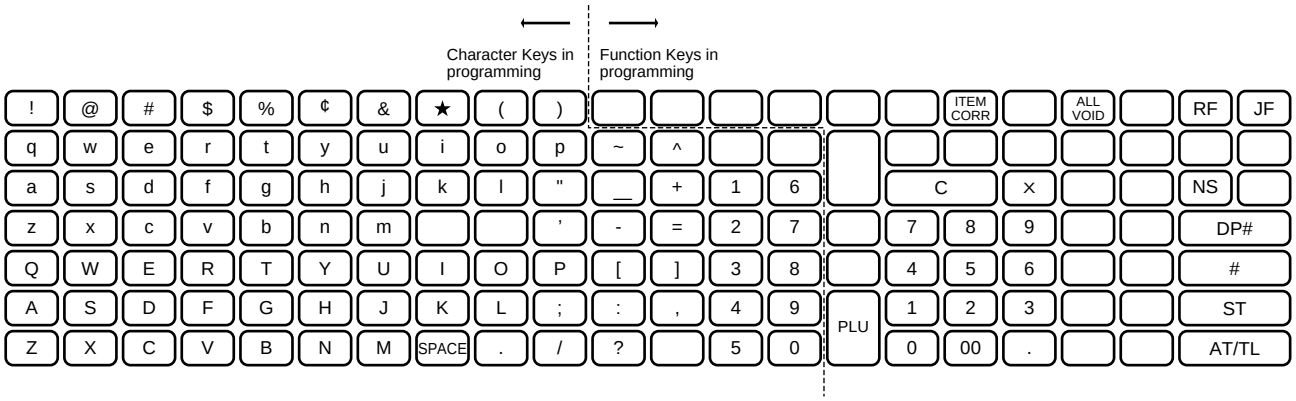
All Double-sized Declaration

6.4 Direct Character Entry Method

Using Flat Keyboard (installed as the ECR Main Keyboard):

-- Setting Mode Key Layout --

(Use the special template for this purpose and insert it between the film layers covering the Flat Keyboard. This key layout is applicable to only certain submodes.)

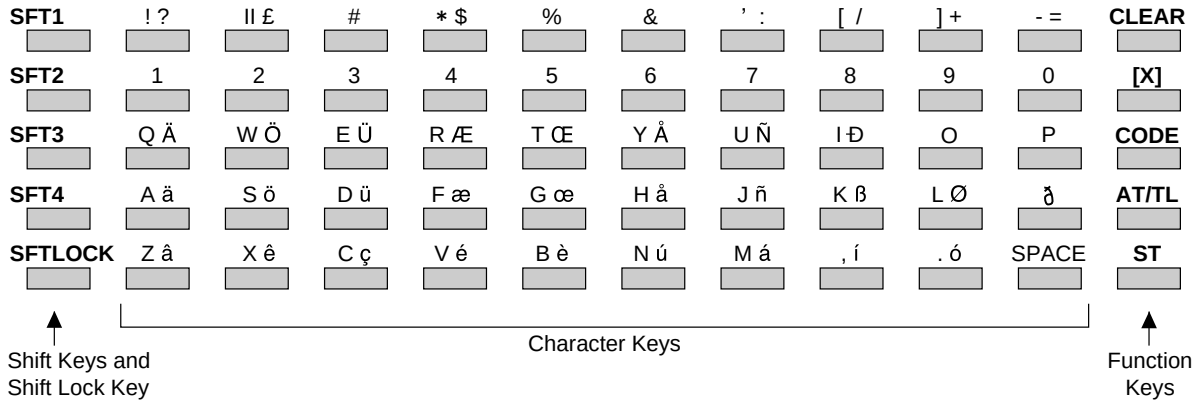


Character Keys: Simply depress the key to enter the character. (The **[#]** key should not follow.) The numerics 1 to 0 are entered as characters 1 to 0 but not as codes for PLU Item Codes, etc.
The One Double-size Declaration (by depressing **[X]** key once prior to the required character) and the All Double-size Declaration (by depressing **[X]** twice before the characters) are the same as in the CHARACTER CODE ENTRY method.

Function Keys: These are function keys to be used in programming operations with the Setting Mode Key Layout. The Numeric Keys here are used to enter PLU Codes, etc. or numeric values as program data, but not to enter the numerics as characters.

(Also, refer to "Case 2: When the ECR Keyboard is Flat Keyboard Type" already stated.)

Using TKB-1 (Programming Keyboard; hardware option)



Shift Keys (1 to 4), Shift Lock Key

Used to designate the shift of the character keys. Each character has three different characters, each of which is designated by the Shift Key 1 to Shift Key 3. (The Shift Key 4 is not used for the MA-1650 series models.) Shift Key 2 and Shift Key 3 are effective for one following character only. After that, the Shift 1 mode is automatically regained.

The Shift Lock Key is used to hold the shifted status for a series of characters. To change the shifted status locked by the Shift Lock Key, one of the Shift Keys (1 to 3) must be pressed prior to the character key depression.

Character Keys

Used to enter alpha/numerics as characters. In setting a name or message, simply depress the corresponding character key here, instead of a character code and the **[#]** key combination on the ECR keyboard.

ex.)

"A" is entered in the Shift 1 mode.
Operate: (**[SFT1]**) **[A ä]**
"a" is entered in the Shift 2 mode.
Operate: **[SFT2] [A ä]**
"ä" is entered in the Shift 3 mode.
Operate: **[SFT3] [A ä]**

The numeric keys **[1]** through **[0]** (on the second row from the top) are used as character keys (i.e. the entered number will be part of the name or message to be printed).
Also note that those numeric keys may be entered in the Shift 1, 2, or 3 mode.

Function Keys

Except for the **[CODE]** key, each of the function keys corresponds to the identical key installed on the ECR keyboard as to the function in programming operations. (**[CLEAR]** = **[C]**, **[X]** = **[@/FOR]**)
The **[CODE]** key cannot be used for the MA-1650 series ECRs.

Operation Examples

To set the PLU name "Tomato" for PLU 1:

ON ECR KEYBOARD ONLY

4 **[X]** 1 **[PLU]** 2 **[ST]** 504 **[#]** 615 **[#]** 613 **[#]** 601 **[#]** 704 **[#]** 615 **[#]** **[ST]** **[AT/TL]**
T o m a t o

USING TKB-1 KEYBOARD

4 **[X]** 1 **[PLU]** 2 **[ST]** → T **[SFT2]** **[SFTLOCK]** OMATO **[ST]** **[AT/TL]**
on ECR
on TKB-1
on ECR or TKB-1

The "One Double-size Declaration" (by depressing **[X]** once prior to the required character) and the "All Double-size Declaration" (by depressing **[X]** twice before the entire descriptor) are the same as in setting characters on the ECR keyboard.
Any characters not listed on the TKB-1 keyboard may be entered by the code entry method on the ECR keyboard.

Using PK-2 (PLU Keyboard; hardware option)
The PK-2 is used to enter a required PLU code by simply depressing the code-preset key on the PK-2 keyboard in the REG or MGR mode. In addition, the PK-2 can be used to enter characters directly during the programming operations that require character settings, such as STORE NAME/MESSAGE AND COMMERCIAL MESSAGE PROGRAMMING, PLU TABLE PROGRAMMING, etc.

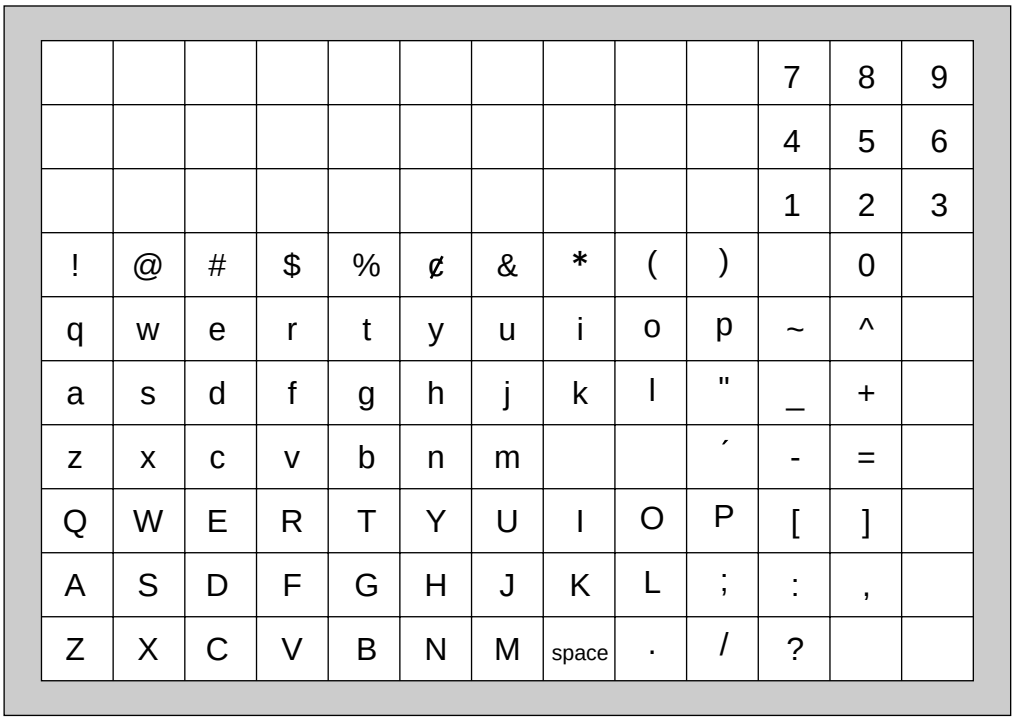
The figure below shows the key indications of the PK-2 keyboard for the character setting purpose. Insert the template for this purpose between the film layers that cover the PK-2 keyboard.

Instead of entering a 3- or 4-digit character code and depressing the **[#]** key on the ECR keyboard, a simple depression of the appropriate key on the PK-2 keyboard will be the character entry.

Unlike the TKB-1, all the function keys, such as **[X]**, **[ST]**, **[#]**, **[AT/TL]**, etc. must be operated on the ECR side. Any characters not listed on the template may be entered by the CHARACTER CODE ENTRY method on the ECR keyboard (the characters even listed on the template may be entered as well by that method).

Please note also that the keys “0” to “9” in the figure below function as character keys but do not function for code entries. Any code entries, for Menu Item Codes, Address Nos, etc. must be entered through the Numeric Keys on the ECR keyboard.

The One Double-size Declaration (by depressing the **[X]** key once prior to the required character) and the All Double-sized Declaration (by depressing **[X]** twice before all the characters) are the same as in the CHARACTER CODE ENTRY method.



										7	8	9
										4	5	6
										1	2	3
!	@	#	$	%	¢	&	*	(	)		0	
q	w	e	r	t	y	u	i	o	p	~	^	
a	s	d	f	g	h	j	k	l	"	_	+	
z	x	c	v	b	n	m			´	-	=	
Q	W	E	R	T	Y	U	I	O	P	[	]	
A	S	D	F	G	H	J	K	L	;	:	,	
Z	X	C	V	B	N	M	space	·	/	?		

6.5 CONDITION REQUIRED FOR PROGRAMMING OPERATIONS

At the top of each programming operation a “CONDITION” is given. Unless the register satisfies this condition, the programming operations will not be allowed.

There are two types of conditions:

“Any time outside a sale”
It means that the programming operation is allowed when a sale is finalized before going into any other sale entry.

“After ...Reset”
It means that the designated reset report must be taken before entering the programming operation. And an error will result if the operation is attempted without taking the report. However, the words “After ... Reset” do not necessarily mean “immediately after ...”.

When the designated reset report has already been taken and then some operations are performed in the SET, X, or Z mode, the condition “After ... Reset” is still satisfied and the programming operation is still allowed.

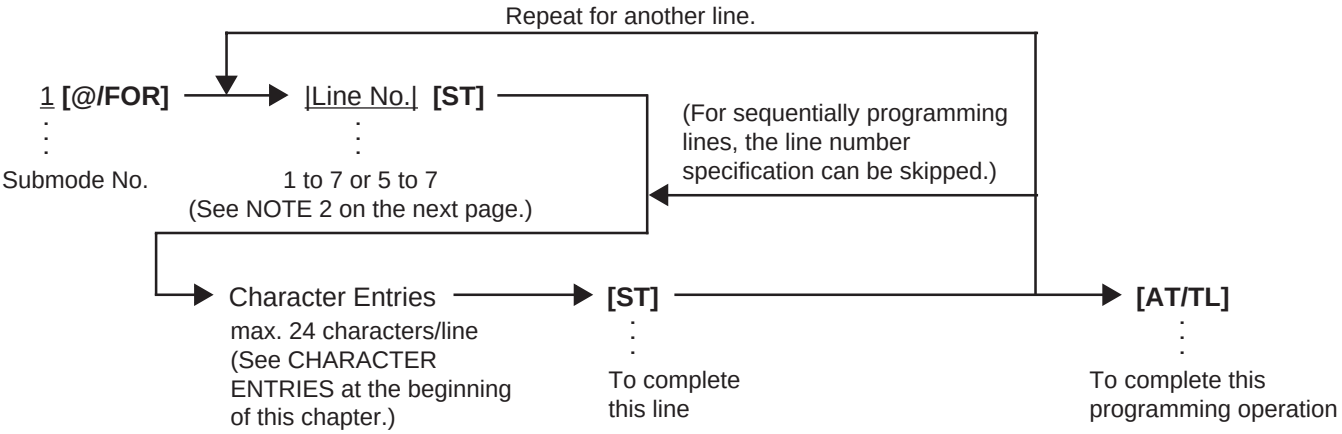
On the contrary, when the designated reset report has been taken but then some sales data relating to that report’s output data are entered in the REG, MGR, or ⊡ mode, the programming operation will no longer be allowed and the same reset report must be taken.

Thus the condition “After ... Reset” indicates that all the sales data relating to the report data must be zero (except non-resettable memory data). Because of this “CONDITION” requirement, the report data will be protected from any inconsistencies of sales data entered in the period from a resetting of the report to another resetting of the same report next time.

6.6 STORE NAME/MESSAGE AND COMMERCIAL MESSAGE PROGRAMMING (Submode 1)

CONDITION — Any time outside a sale

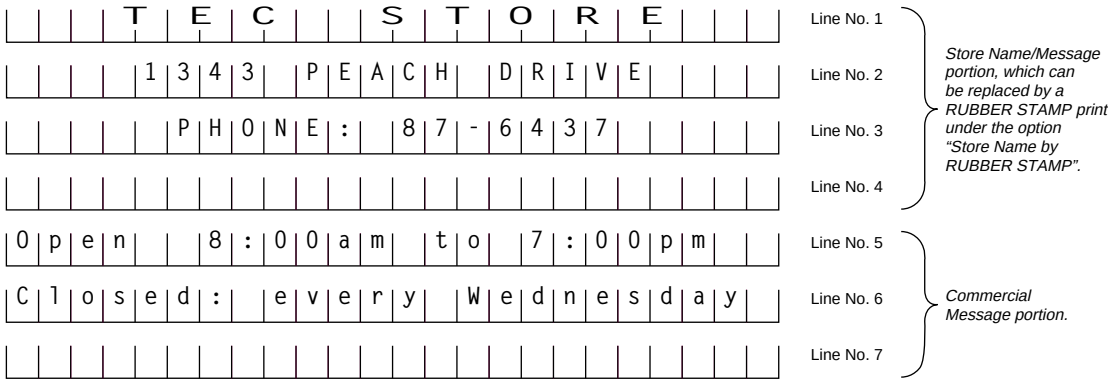
OPERATION — Mode Lock: SET



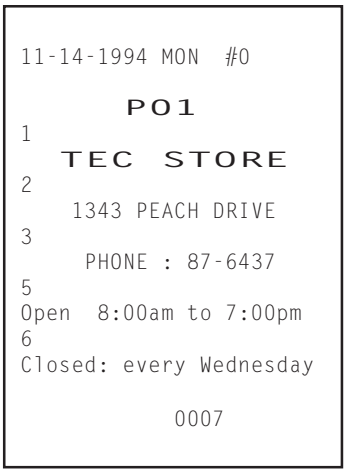
NOTES: *1. For each line, a maximum of 24 regular-sized characters or 12 double-sized characters may be entered. A combination of both types is also available.*

2. *Even if the option "Store Name Print by RUBBER STAMP" is selected, data can be programmed for the store name/message. However, the Rubber Stamp, instead of the programmed name/ message will actually be printed for operations to issue receipts.*
   If the option "Store Name Print by DOT PRINTER" is selected, use 1 through 4 for the store name/message and 5 through 7 for the commercial message data, as Line No.
   The range of Line Nos. 5 to 7 is unavailable to a manual-cut printer.
3. *If no commercial message is required on the receipt, program blanks for all three lines. As a result no extra lines will be fed. If any one of the three lines is programmed, the two other lines will cause line feeds.*
4. *The 4-line range assigned for the store name/message will be either printed or fed, regardless of any system option selection.*
5. *If any incorrect characters have been programmed, depress the **[C]** key to clear all the characters on a line and then re-enter characters from the beginning, or end the line with an **[ST]** and re-program the entire line. The new data will be active.*
6. *When all the lines have been programmed, do a check by issuing a receipt. Only the lines with errors need to be re-programmed; other lines will not be affected.*

ex.) To program the following draft as the Store Name/Message and Commercial Message (under the option "Store Name by DOT PRINTER"):



OPERATION: Presumed that nothing has been programmed on each line.
Mode Lock; SET; enter 1, depress **[@/FOR]**.



1 **[ST]** (Line No.1)
[#] (space)
[#] (space)
[#] (space)
[X] 504 **[#]** (**T**)
[X] 405 **[#]** (**E**)
[X] 403 **[#]** (**C**)
[#] (space)
[#] (space)
[X] 503 **[#]** (**S**)
[X] 504 **[#]** (**T**)
[X] 415 **[#]** (**O**)
[X] 502 **[#]** (**R**)
[X] 405 **[#]** (**E**)
[ST] (to complete Line 1)

(2 **[ST]**) (Line No.2)
[#] (space)
[#] (space)
[#] (space)
[#] (space)
301 **[#]** (1)
303 **[#]** (3)
304 **[#]** (4)
303 **[#]** (3)
[#] (space)
500 **[#]** (P)
405 **[#]** (E)
401 **[#]** (A)
403 **[#]** (C)
408 **[#]** (H)
[#] (space)
404 **[#]** (D)
502 **[#]** (R)
409 **[#]** (I)
506 **[#]** (V)
405 **[#]** (E)
[ST] (to complete Line 2)

(3 **[ST]**) (Line No.3)
[#] (space)
[#] (space)
[#] (space)
[#] (space)
[#] (space)
500 **[#]** (P)
408 **[#]** (H)
415 **[#]** (O)
414 **[#]** (N)
405 **[#]** (E)
310 **[#]** (:)
[#] (space)
308 **[#]** (8)
307 **[#]** (7)
213 **[#]** (-)
306 **[#]** (6)
304 **[#]** (4)
303 **[#]** (3)
307 **[#]** (7)
[ST] (to complete Line 3)

5 **[ST]** (Line No.5)
415 **[#]** (O)
700 **[#]** (p)
605 **[#]** (e)
614 **[#]** (n)
[#] (space)
⋮
[ST] (to complete Line 5)

(6 **[ST]**) (Line No.6)
403 **[#]** (C)
612 **[#]** (l)
615 **[#]** (o)
703 **[#]** (s)
⋮
[ST] (to complete Line 6)

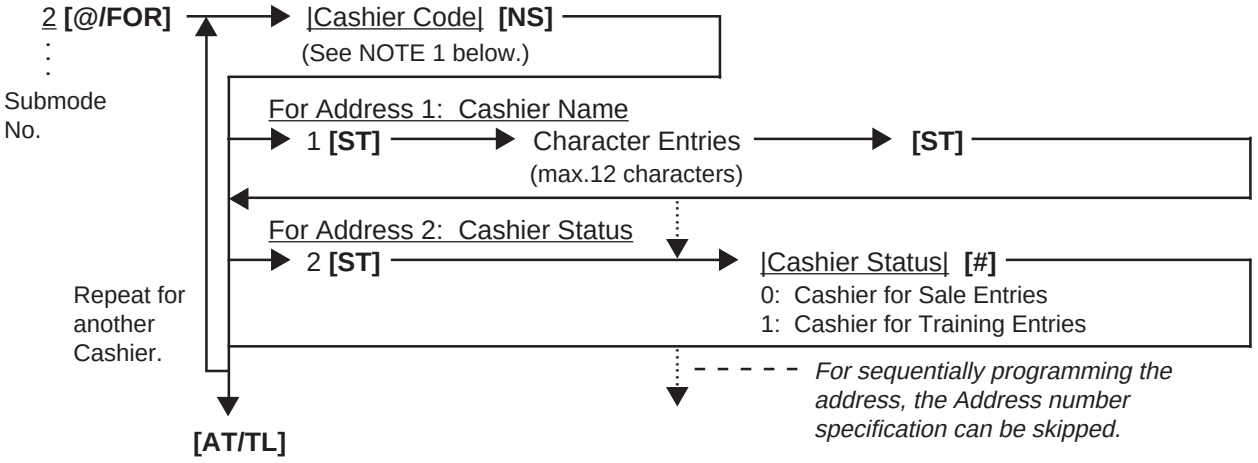
[AT/TL] to complete this submode.

6.7 CASHIER CODE AND NAME PROGRAMMING (Submode 2)

Programming

CONDITION Any time outside a sale

OPERATION Mode Lock: SET



NOTES: *1. The following table shows the Cashier Codes that can be entered. (The capacity is determined by the RAM Allocation Setting.) However, the actual maximum number of the cashiers are preprogrammed. Therefore, ask your TOSHIBA TEC representative for further information.*

		Standard Memory	Expansion Memory
Code Entry Type		1 to 15	1 to 99
Cashier Key Type	Push-stay	1 to 4, 99*	---
	[CLK] key	1 to 8, 99*	---

* The Cashier Code 99 for the Cashier Key Type is fixed as a code of a cashier for Training Entries.

2. For the name of each cashier, a maximum of 12 regular-sized or 6 double-sized characters can be entered. A combination of both types is also available. (At least one character must be entered here.)

3. When adopting the Push-stay Cashier Key, the cashier key "OFF" status is required for this programming.

ex.) To program the following cashier data:
Cashier Code 1: Name JONES, Status 0 (for Sale Entries)
Cashier Code 2: Name SMITH, Status 0 (for Sale Entries)
Cashier Code 3: Name MEHL, Status 1 (for Training Entries)
Cashier Code 4: Name BROWN, Status 1 (for Training Entries)

Mode Lock: SET
Enter 2, depress **[@/FOR]**.
Enter 1, depress **[NS]** (Cashier Code)
Enter 1, depress **[ST]** (Address 1: Name)
Enter 410, depress **[#]** (J)
Enter 415, depress **[#]** (O)
Enter 414, depress **[#]** (N)
Enter 405, depress **[#]** (E)
Enter 503, depress **[#]** (S)
Depress **[ST]** (to end Name setting)
(Enter 2, depress **[ST]**) (Address 2: Status)
Enter 0, depress **[#]** (for Sales Entries)

Enter 2, depress **[NS]** (Cashier Code)
Enter 1, depress **[ST]** (Address 1: Name)
Enter 503, depress **[#]** (S)
:
Enter 408, depress **[#]** (H)
Depress **[ST]** (to end Name setting)
(Enter 2, depress **[ST]**) (Address 2: Status)
Enter 0, depress **[#]** (for Sales Entries)

Enter 3, depress **[NS]** (Cashier Code)
Enter 1, depress **[ST]** (Address 1: Name)
Enter 413, depress **[#]** (M)
:
Enter 412, depress **[#]** (L)
(Enter 2, depress **[ST]**) (Address 2: Status)
Enter 1, depress **[#]** (for Training Entries)

Enter 4, depress **[NS]** (Cashier Code)
Enter 1, depress **[ST]** (Address 1: Name)
Enter 402, depress **[#]** (B)
:
Enter 414, depress **[#]** (N)
(Enter 2, depress **[ST]**) (Address 2: Status)
Enter 1, depress **[#]** (for Training Entries)

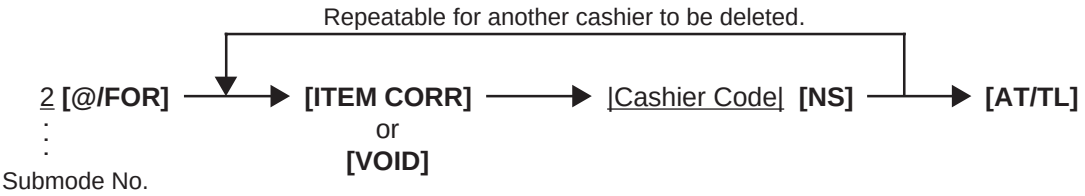
Depress **[AT/TL]** to end this submode.

```
11-14-1994 MON  #0

        P02
01
#01          JONES
#02                0
02
#01          SMITH
#02                0
03
#01          MEHL
#02                1
04
#01          BROWN
#02                1
00004

             0016
```

Deletion

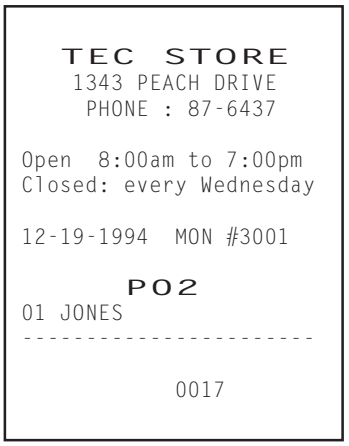
CONDITION After the Daily and GT Cashier's Resets, (and his/her Sign OFF for Code Entry Type)

OPERATION Mode Lock: SET



NOTES:
1. *The Cashier Reset Report Count of the deleted cashier will be cleared.*
2. *The cashier key or cashier code of the deleted cashier cannot be used or signed-ON for sale entries.*

ex.) To delete Cashier Code 1 with name "JONES" that has been programmed in the preceding page:
Mode Lock: SET
Enter 2,depress **[@/FOR]**.
Depress **[ITEM CORR]**
(for declaration of deletion)
Enter 1,depress **[NS]** (Cashier Code)
Depress **[AT/TL]** to end this program.



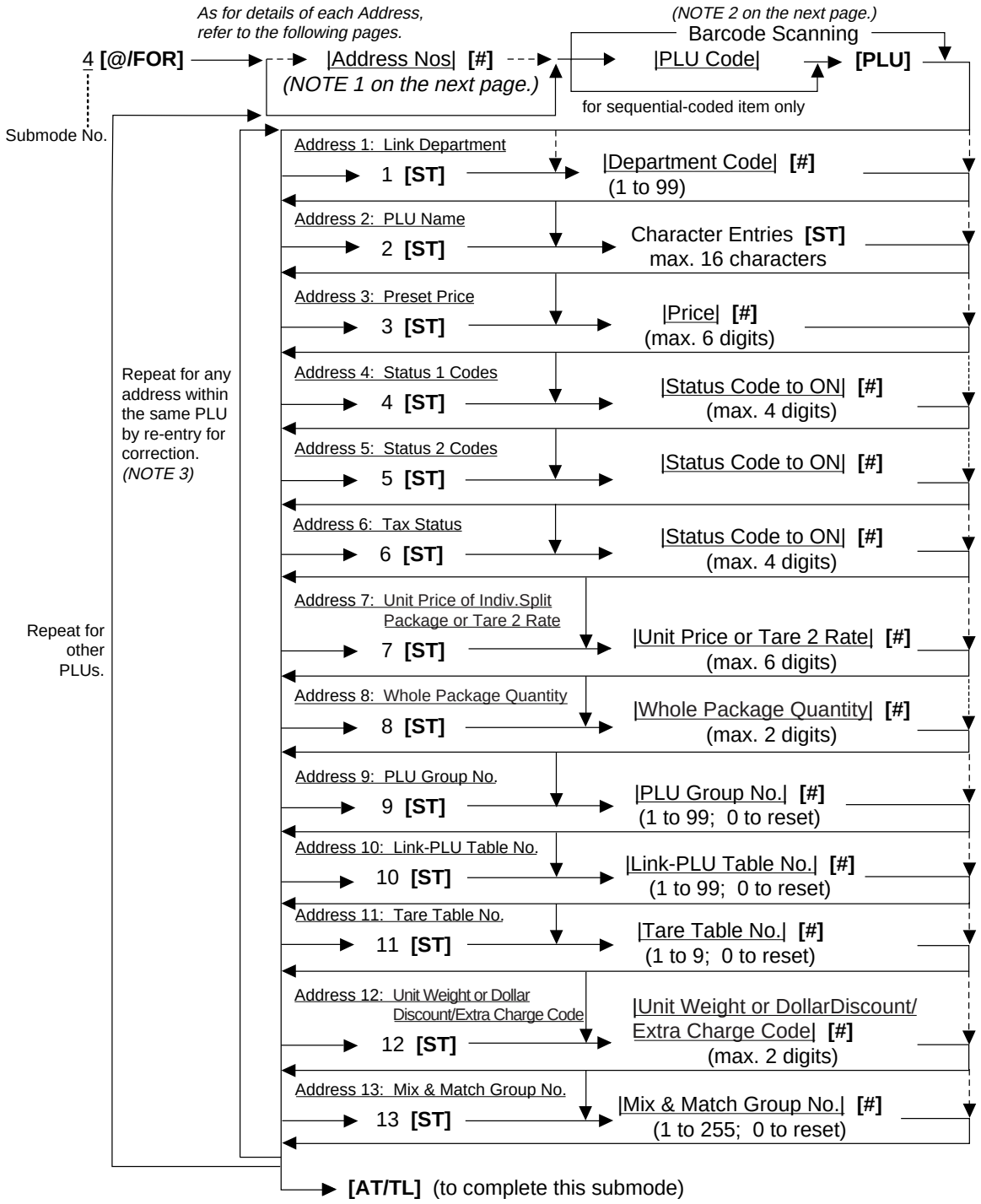
6.8 PLU TABLE PROGRAMMING (Submode 4)

This submode can be operated when new PLU items are to be added, PLU program data is to be changed, or PLUs are to be deleted.

Programming or Changing

CONDITION — To program new PLUs or to change any programmed contents of PLUs except the following case: Any time outside a sale
To change the linked Department of a PLU with sales data not zero: After PLU Reset

OPERATION — Mode Lock: SET



NOTES:
1. *The "Address Nos" designation at the top after "4* ***[@/FOR]****" can be skipped if not necessary. If entered, the designated Address (es) will automatically be accessed after the PLU Code designation.*
2. *A maximum of 65,000 PLUs are programmable (varies depending on the capacity and allocation of the RAM). Also refer to the "CODING PLUs" to be described at the end of this section. The "****[PLU]****" key here indicates the key labeled simply as "PLU" but not any PLU Preset-code Keys.*
3. *When the Address No. is sequential from the preceding address (if the Address Designation feature has not been used), the Address No. and the following* ***[ST]*** *can be omitted.*
4. *The programming contents of each address are further described in the PLU TABLE PROGRAMMING CONTENTS below.*

PLU TABLE PROGRAMMING CONTENTS

<table>
<tr><th>Address No.</th><th>Description of Programming Contents</th></tr>
<tr><td>1</td><td>Linked Department Code
Enter the 2-digit code of the department to which the PLU is linked. When the PLU is newly programmed, this entry is compulsory (an error will result if this entry is skipped.)
|__|__| [#]
1 to 99</td></tr>
<tr><td>2</td><td>PLU Name (Descriptor)
Enter a maximum of 16 regular-sized or 8 double-sized characters. See the CHARACTER ENTRIES at the beginning of this chapter. End with [ST].
When no name is programmed for a PLU, the following will be the auto-program name for printing:
PLUxxxxxx (for PLU Code Max. 6-digit feature)
PLUxxxxxxxxxxxxx (for PLU Code Max. 13-digit feature)</td></tr>
<tr><td>3</td><td>Preset Price
• For a preset PLU (preset-price PLU, enter a maximum of 6-digit price, and depress [#].
1 to 999999 (result: $0,01 to $9999,99)
When the option "Preset Point for one decimal digit allowed" is selected, the decimal digit can be entered after entering a maximum of 5 integer digits and the [•] key
1 to 99999 (result: $0,01 to $999,99) or 0,1 to 99999,9 (result: $0,001 to $999,999)
• A zero-price ($0,00) may be preset by entering 0 in the above operation.
• When no numerics are entered and the [#] key is simply depressed, the PLU will be an open PLU (open-price PLU).</td></tr>
<tr><td>4</td><td>Status Selection
• Enter the Status Codes 1 to 8 whose status must be set to ON side. More than one code may be entered. Enter 0 when none of the statuses should be set to ON. However, the Scale-Compulsory Status (Code 5) and HI-CONE Status (Code 6) cannot be combined for one PLU.

<table>
<tr><th rowspan="2">Status Code</th><th rowspan="2">Item</th><th colspan="2">Selective Status</th></tr>
<tr><th>OFF</th><th>ON</th></tr>
<tr><td>1</td><td>Quantity Entry</td><td>Optional</td><td>Compulsory</td></tr>
<tr><td>2</td><td>Net to S.I. 1?</td><td>No</td><td>Yes</td></tr>
<tr><td>3</td><td>Net to S.I. 2?</td><td>No</td><td>Yes</td></tr>
<tr><td>4</td><td>Food Stamp (or GST) Status?</td><td>No</td><td>Yes</td></tr>
<tr><td>5</td><td>Scale Entry</td><td>Prohibited</td><td>Compulsory</td></tr>
<tr><td>6</td><td>HI-CONE Status?</td><td>No</td><td>Yes</td></tr>
<tr><td>7</td><td>Lock or Unlock?</td><td>Unlock (in use)</td><td>Lock (not in use)</td></tr>
<tr><td>8</td><td>Delete Status</td><td>No</td><td>Delete</td></tr>
</table>
</td></tr>
</table>

-- Continued on next page --

<table>
<tr><th>Address No.</th><th>Description of Programming Contents</th></tr>
<tr><td colspan="2">-- Continued --</td></tr>
<tr><td></td><td>
NOTES:
• When the Quantity Entry Compulsory Status is selected, the quantity entry is always necessary for PLU item entry. However, if the [PACK] or [3rd PRICE] key is depressed, this compulsory status will be ignored.
• Net to S.I. 1, 2 ..... Refer to the section of PRESET RATE SETTING FOR SELECTIVE ITEMIZERS near the end of this chapter.
• The HI-CONE Status (Code 6) is effective only with the Scanning feature.
• The HI-CONE Status (Code 6) requires setting of the Whole Package Quantity (Address 8).
• The Delete Status set is possible only when the PLU center file is selected.
Setting Examples:
To set only Status 2 to ON ..... Enter 2 [#]
To set Statuses 2,3,5 to ON ..... Enter 235 [#]
To set none of statuses to ON ..... Enter 0 [#]
</td></tr>
<tr><td>5</td><td>
<u>Status 2 Selection</u>
• Enter the Status Codes 2 to 7 (Code 3 is vacant.) whose status must be set to ON side. More than one code may be entered. Enter 0 when none of the statuses should be set to ON. However, the Age Limit 2 or Age Limit 1 Status (Code 6 or 7) is unavailable for the Scale Entry Compulsory PLU (Code 5 in Status 1 Selection).
<table>
<tr><th rowspan="2">Status Code</th><th rowspan="2">Item</th><th colspan="2">Selective Status</th></tr>
<tr><th>OFF</th><th>ON</th></tr>
<tr><td>1</td><td>Price Print</td><td>Print</td><td>Non-print</td></tr>
<tr><td>2</td><td>Tare 3 Entry</td><td>Optional</td><td>Compulsory</td></tr>
<tr><td>3</td><td>-- vacant --</td><td></td><td></td></tr>
<tr><td>4</td><td>Tax Symbol “F” Print</td><td>Non-print</td><td>Print</td></tr>
<tr><td>5</td><td>Canada Non-taxable Quantity</td><td>Not objective</td><td>Objective</td></tr>
<tr><td>6</td><td>Age Limit 2 Status
(Age confirmation is necessary for sale entry.)</td><td>Unnecessary</td><td>Necessary</td></tr>
<tr><td>7</td><td>Age Limit 1 Status
(Age confirmation is necessary for sale entry.)</td><td>Unnecessary</td><td>Necessary</td></tr>
</table>
NOTES:
• When the Price Print Status is set to ON (Non-print), PLU price will not be printed. However, when the Quantity Extension transaction is performed for the PLU, its price will be always printed regardless of this status selection. <u>Do not set this status code ON.</u>
• Tax symbol “F” is printed when this status code has been set ON to a taxable PLU.
1) If the GST feature has been selected, this symbol “F” will be always printed regardless of this code status when a GST taxable PLU is entered.
2) If the Food Stamp feature has been selected, this symbol “F” will be always printed regardless of this code status when a food stamp taxable PLU is entered.
* In Canada, some area handles two kinds of tax; GST and PST. Status Code 4 (Tax Print “F” Print) should be set when the GST status has been selected in the Status 1 Selection on the preceding page.
Tax Symbol “T” .... PST
Tax Symbol “F” .... GST
• When the Age Limit 1 or Age Limit 2 Status is set to ON, the age confirmation is always necessary before entering a sales item. On the application, the Age Limit 1 Status is applied to a sales item with the age limit younger than that of the Age Limit 2 Status.
</td></tr>
</table>

-- Continued on next page --

Address No.	Description of Programming Contents
	-- Continued --
6	Tax Status • Enter one-to four-digit Status Codes for applicable Tax. |___|___|___|___| **[#]** | 0: Non-taxable 1: Tax 1 (Tax 1 taxable) 2: Tax 2 3: Tax 3 4: Tax 4 (More than one code can be entered for combining Tax 1 to Tax 4 taxable status. For example, enter 12 to select Tax 1 and Tax 2 taxable status.) ***NOTE:*** *In case of inclusive tax, the combination of the tax status is unavailable. Only one inclusive tax status can be programmed. (Tax 3 taxable or Tax 4 taxable.)*
7	Unit Price of Individual Split Package • To preset the unit price of individual split package, enter a maximum of 6-digit price, and depress **[#]**. • To cancel the unit price of individual split package, enter 0 and depress **[#]**. (When the unit price of individual split package is not preset (or 0), whole package price (Address 3 setting) will be used in the registration. Tare 2 Rate If the scale status is set, and a number is entered in this area, Tare 2 rate is used. (0 to 9999; 0% to 99.99%)
8	Whole Package Quantity (for Split Package Pricing PLUs) |___|___| **[#]** | Enter the whole package quantity in max. 2 digits (1 to 99), or enter 0 to cancel the Split Package Pricing status. Be sure to set a whole package quantity here for PLUs with HI-CONE Status (Address 4 -Code 6) or Mix & Match Group No. (Address 13). **NOTES:** • This setting is not allowed for PLUs with the Scale-compulsory status. • When the option “Preset Point for one decimal digit” is selected, this setting is not allowed to any PLUs.
9	PLU Group No. (for purposes of reports) • Enter a 2-digit code (1 to 99) as a PLU Group No. to which the PLU belongs, and depress **[#]**. To cancel the Group No. once set, enter 0 and depress **[#]**.

-- Continued on next page --

<table>
<tr><th>Address No.</th><th>Description of Programming Contents</th></tr>
<tr><td colspan="2">-- Continued --</td></tr>
<tr><td>10</td><td>
Link-PLU Table No. (for PLU-to-PLU linking requirement only)
• This entry is useful, when the PLU item entry should always be followed by another PLU item sale. If the PLU is not applied to this case, skip this address entry. Refer to the following examples of applications:

<table>
<tr><td></td><td>HEAD-LINK PLU</td><td>SUB-LINK PLU</td></tr>
<tr><td>Example 1)</td><td>PLU1: Coca-Cola Small Bottle Net Content at $0,45</td><td>PLU2: Bottle Deposit for the small bottle at $0,05</td></tr>
<tr><td>Example 2)</td><td>PLU 101: Battery-drive Clock at $20,00</td><td>PLU 202: Battery Pack at $1,50</td></tr>
</table>

As shown in the examples, this feature prevents the cashier from forgetting to enter the Sub-link PLU item attached to the Head-link PLU item.
And at the same time, in reports, two PLU Totals are separately read.
• In setting, enter the Link-PLU Table No. (1 to 99) and then depress [#].
|___|___| [#]
1 to 99 (Link-PLU Table No.) The Sub-link PLU which link to the Link-PLU Table will be programmed in a separate programming operation later.

• To cancel the sub-linking, enter 0 instead of the Link-PLU Table No. before [#].
• REMARKS:
1) When the Head-link PLU is entered in a sale, the Sub-link PLU will automatically be entered. When the Sub-link PLU is an open-price PLU, the price entry and the [AMT] key depression should follow manually on the main keyboard.
This manual operation sequence cannot be replaced by a PLU Preset-code Key on the main keyboard or on the PK-2 keyboard.
2) The PLU-to-PLU linkage is effective even when the Head-link PLU is an open-price PLU.
3) The linkage is effective in a sale only for one Head-link PLU and one Sub-link PLU. If the Sub-link PLU is further programmed with another Sub-link PLUs (with a Link-PLU Table No.), the third PLU will not automatically entered.
4) It is possible to set multiple PLUs as Head-link to one Sub-link PLU. (In Example 1 described above, it may be extended to have more Head-link PLUs of similar items such as 7-up, which also link to the Bottle Deposit of the same amount.)
5) Repeat, Item Correct, Dollar Discount, Vendor Coupon, Bottle Return, %+, or %- operations are not accepted for PLU-to-PLU link entries. But Return Merchandise or Void operation is possible for the Head-link (and the Sub-link PLU will be processed as returned or voided item automatically, in this case).
6) The Sub-link PLU may be operated for sales entries, skipping the Head-link PLU, without affecting the Head-link PLU sales memory.
7) Multiplication is possible on the Head-link PLU, and then the Sub-link PLU will automatically be multiplied with the same quantity.
8) Modifier Keys (such as [SI/M]) will be effective for the Head-link PLU item only, and the modification will be disregarded for the Sub-link PLU.
9) When an error occurs at the Sub-link PLU, only the Head-link PLU is entered but not the Sub-link PLU. (Errors such as Multiplication Product Over-limit Error, the Sub-link PLU has not been opened, the sale subtotal will turn into negative, etc.)
</td></tr>
</table>

-- Continued on next page --

Address No.	Description of Programming Contents
	-- Continued --
(10)	10) When the Sub-link is a negative PLU, a Return Merchandise or Void entry through the Head-link PLU is not possible. 11) None of Scale-Compulsory PLUs should be linked as Sub-link to another PLU of Head-link. An error will result on the Head-link item entry attempt in this case. 12) When a price-change entry is made (using the **[PR OPEN]** or **[OPEN]** key) through the Head-link PLU, the Sub-link PLU will always require a manual price entry even if that PLU is a preset price type PLU. 13) PLU with the Alcoholic Beverage, Cigarette or Quantity Entry Compulsory Status programmed cannot be used for Link-PLU.
11	Tare Table No. (for Scale-compulsory PLUs only) |__| **[#]** Enter the Tare Table No. (1 to 9). The content of each Tare Table is set later in a separate operation (Submode 26). In a scale item entry of a PLU with a Tare Table No. set, the tare weight preset in the Tare Table will automatically be subtracted from the total weight read from the scale. Enter 0 to cancel a Tare Table No. once set. Or skip this address setting for PLUs not needing any tare weight calculations.
12	Individual PLU Unit Weight Table Code (for Scale-compulsory PLUs only) |__|__| **[#]** LB unit / Kg unit 0: *General Unit Weight (set in Submode 26)* 1: 1 LB / 1 Kg 2: 2 LB / 2 Kg 3: 3 LB / 3 Kg 4: 4 LB / 4 Kg 5: 5 LB / 5 Kg 6: 6 LB / 6 Kg 7: 7 LB / 7 Kg 8: 8 LB / 8 Kg 9: 9 LB / 9 Kg 10: 1/2 LB / 100 g 11: 1/4 LB / not applicable ***NOTE:*** *Whether the ECR adopts the LB or Kg unit system is determined by a program option selection.* Dollar Discount/Extra Charge Code Enter the Dollar Discount/Extra Charge Code (1 to 99), then depress the **[#]** key. Enter 0 as the Dollar Discount/Extra Charge Code to reset the code once programmed.
13	Mix &Match Group No. |__|__|__| **[#]** Enter the Mix & Match Group No. (1 to 255). To cancel the Mix & Match Group once set, enter 0. ***NOTE:*** *This Mix & Match Group No. setting is only possible when a Whole Package Quantity (Address 8) is set.*

ADDITIONAL NOTES

If a PLU is linked to a negative Department, the PLU is automatically set as negative PLU. If a PLU is linked to an Other Income Department, the PLU is automatically set as Other Income PLU.
When a negative PLU is set with the Scale-Compulsory status, an error will result in a sale entry attempt of that PLU.

Amount Limits (High Amount, Low Amount) of each open-price PLU will be determined by those of its link department.
The program option allows you to select that the Tax Status and the Food Stamp Status of each PLU are determined by those of its link department.

ex.) To program the following PLUs:

PLU CODE	Address 1	Address 2	Address 3	Address 4	Address 6	Address 7	Address 8	Address 9	Address 10	Address 11	Address 12	Address 13
	Linked Dept. Code	PLU Name	Preset Price	Status-ON codes	Tax Status	Split Package Unit Price	Whole Package Q'ty	PLU Group No.	Link-PLU Table No.	Tare Table No.	Indiv. PLU Unit Weight Table Code	M & M Group No.
10101	1	Tomato	1,00	4	1		6	1	---			
10102	1	Potato	0,80	4	1		6	1	---			
20101	2	Orange	0,75	4	1		4	1	---			
20102	2	Lemon	1,00	4	1		4	1	---			
20105	2	Apple	0,90	4	1		4	1	---			
30301	3	Beef	2,50	45	1			3	---		1	
30302	3	Pork	2,00	45	1			3	---		1	
30303	3	Mutton	1,80	45	1			3	---		1	
40201	4	Salmon	0,75	45	1			2	---		1	
40202	4	Cod	0,40	45	1			2	---		1	
40203	4	Shrimp	0,60	45	1			2	---	1	1	
50301	5	Milk-Large Pack	1,30	24	1			3	---			
50302	5	Milk-Small Pack	0,40	24	1			3	---			
50303	5	Nonfat-Milk Pack	1,10	24	1			3	---			
50321	5	Cheese-Half Pck	2,50	24	1			3	---			
50322	5	Eggs-6 Pack	open	24	1			3	---			
60401	6	White Bread Loaf	1,20	24	1			4	---			
60402	6	Rye Bread Loaf	1,20	24	1			4	---			
60403	6	Soft Rolls-6	0,90	24	1			4	---			
60404	6	Hard Rolls-4	0,80	24	1			4	---			
70501	7	Tuna Can	0,50	24	1			5	---			
70502	77	Soup Can	0,45	24	1			5	---			
80501	8	Strawberry Jam	1,80	24	1	1.11	4	5	---			1
80502	8	Kiwi Jam	1,90	24	1	1.11	2	5	---			1
80503	8	Pickles	1,20	24	1			5	---			
90601	9	Coke Small-B	0,60	26	1			6	1			
90701	9	7-up Small-B	0,60	26	1			7	1			
101301	10	Small-Btl Depo	0,05	0	1			13	---			
110501	11	Potato Chips	1,50	2	1			5	---			
120501	12	Nutmeg	0,60	2	1			5	---			

x x x x x x PLU Coding Method in this example:
- Serial No. 00 to 99:
- Wholesaler Code 00 to 99
- Link Department Code 1 to 99

Refer to "CODING PLUs."

1 to 99 | 1 to 99 | 1 to 9 | | 1 to 255

0: Non-taxable
1: Add-on Tax 1
2: Add-on Tax 2
3: Add-on Tax 3
4: Add-on Tax 4

0: No ON-statuses
1: Quantity Entry Compulsory status
2: Net to S.I. 1
3: Net to S.I. 2

4: Food Stamp (or GST) Status
5: Scale-Compulsory
6: HI-CONE Status
7: Lock (not in use) status

0: General
1: 1LB/1Kg
2: 2LB/2Kg
⋮
9: 9LB/9Kg
10: 1/2LB/100g
11: 1/4LB/not applicable

-- KEY OPERATION is on the next page --

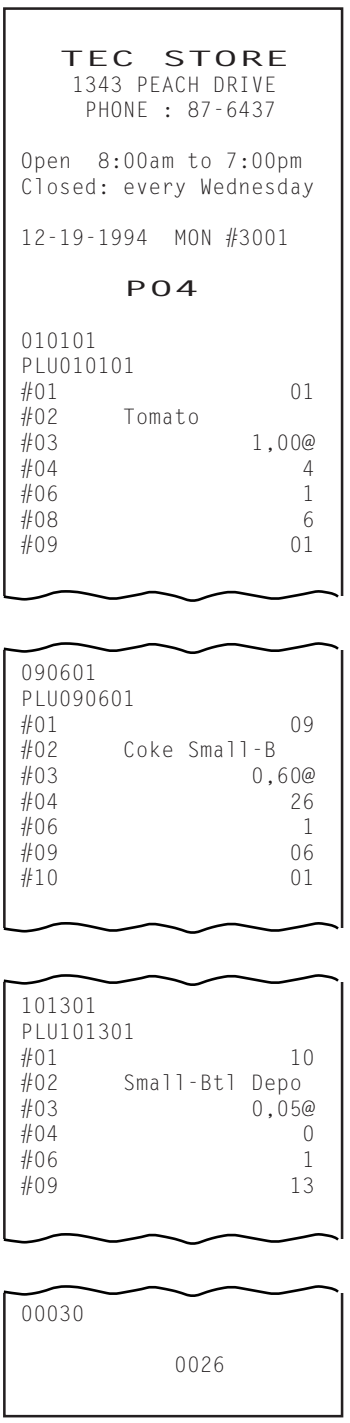
KEY OPERATION: for programming some of the PLUs listed on the preceding page.
(Presumed that the following PLUs are newly programmed.)

Mode Lock: SET, enter 4, depress **[@/FOR]**.
10101 **[PLU]** 1 **[ST]** 1 **[#]** (PLU Code; Linked Dept)
2 **[ST]** 504 **[#]** 615 **[#]** 613 **[#]** 601 **[#]** 704 **[#]** 615 **[#]** **[ST]** (Name: Tomato)
3 **[ST]** 100 **[#]** (Preset Price/Whole Package)
4 **[ST]** 4 **[#]** (ON-status Codes: Food Stampable)
6 **[ST]** 1 **[#]** (Tax 1 taxable)
8 **[ST]** 6 **[#]** (Whole Package Quantity is 6)
9 **[ST]** 1 **[#]** (PLU Group No.)
⋮

90601 **[PLU]** 1 **[ST]** 9 **[#]** (PLU Code; Linked Dept)
2 **[ST]** 403 **[#]** 615 **[#]** 611 **[#]** 605 **[#]** **[#]**
503 **[#]** 613 **[#]** 601 **[#]** 612 **[#]** 612 **[#]** 213 **[#]**
402 **[#]** **[ST]** (Name: Coke Small-B)
3 **[ST]** 60 **[#]** (Preset Price /one-bottle net)
4 **[ST]** 12 **[#]** (ON-status Codes; Net to S.I. 1 & HI-CONE)
6 **[ST]** 1 **[#]** (Tax 1 taxable)
9 **[ST]** 6 **[#]** (PLU Group No.)
10 **[ST]** 1 **[#]** (Link-PLU Table No.)
⋮

101301 **[PLU]** 1 **[ST]** 10 **[#]** (PLU Code; Linked Dept)
2 **[ST]** 503 **[#]** 613 **[#]** 601 **[#]** 612 **[#]** 612 **[#]** 213 **[#]**
402 **[#]** 704 **[#]** 612 **[#]** **[#]**
404 **[#]** 605 **[#]** 700 **[#]**
615 **[#]** **[ST]** (Name: Small-Btl Depo)
3 **[ST]** 5 **[#]** (Preset Price /bottle)
4 **[ST]** 0 **[#]** (ON-status Codes; no ON-statuses)
6 **[ST]** 1 **[#]** (Tax 1 taxable)
9 **[ST]** 13 **[#]** (PLU Group No.)
⋮

[AT/TL] to end



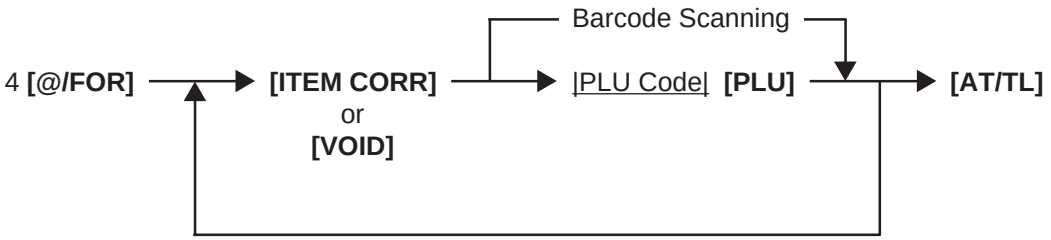
```
TEC STORE
1343 PEACH DRIVE
PHONE : 87-6437

Open  8:00am to 7:00pm
Closed: every Wednesday

12-19-1994  MON #3001

P04

010101
PLU010101
#01                  01
#02     Tomato
#03              1,00@
#04                   4
#06                   1
#08                   6
#09                  01

090601
PLU090601
#01                  09
#02     Coke Small-B
#03              0,60@
#04                  26
#06                   1
#09                  06
#10                  01

101301
PLU101301
#01                  10
#02     Small-Btl Depo
#03              0,05@
#04                   0
#06                   1
#09                  13

00030

          0026
```

Deletion

CONDITION — To delete a PLU with sales data of zero: Any time outside a sale
To delete a PLU with sales data of not zero: After PLU Reset

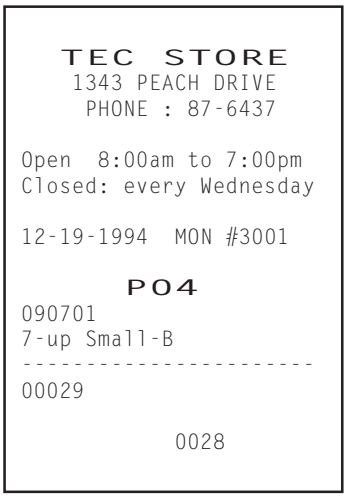
OPERATION — Mode Lock: SET

Individual PLU Deletion

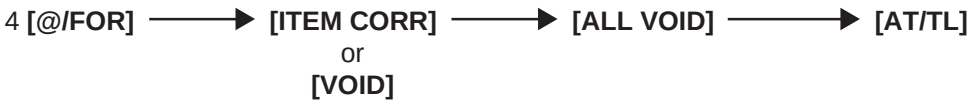


Repeatable for other PLUs to be deleted.

ex.) To delete PLU No. 90701 (7-up Small-B) that was once programmed:
Mode Lock: SET
Enter 4, depress **[@/FOR]**.
[ITEM CORR] 90701 **[PLU]**
[AT/TL]



All PLU Deletion



6.9 PLU Programmed Data Copying

This operation is used to copy the programmed data of a PLU item and to use it in programming another PLU item, thus eliminating time in PLU programming operation.

CONDITION

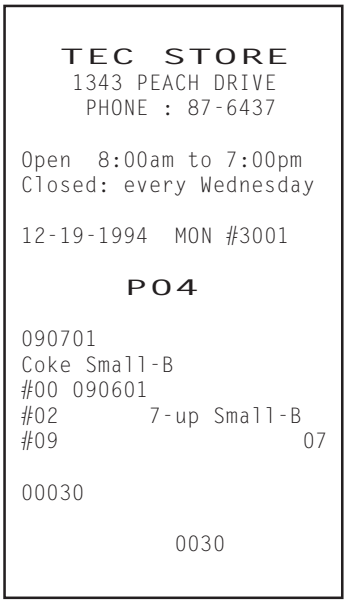
To program new PLUs or to change any programmed contents of PLUs:
Any time outside a sale (except the following case)
To change the PLU of the copy-destination with sales data not zero:
After PLU Reset

OPERATION

Mode Lock: SET

4 **[@/FOR]** → |PLU Code of the copy-destination| **[PLU]** → **[NS]**
→ |PLU Code of the copy-source| **[PLU]**
→ The programmed data of the copy-source PLU is now copied to the copy-destination PLU (except the PLU Code). Then follow the procedure on the page of **Programming or Changing** to change data of any required Addresses.

ex.) To program PLU 90701 (7-up Small-B) again that was once programmed and then deleted, by copying the programmed data of PLU 90601 (Coke Small-B):
Mode Lock: SET, enter 4, depress **[@/FOR]**
90701 **[PLU]** (PLU Code of the copy-destination)
[NS]
90601 **[PLU]** (PLU Code of the copy-source)
2 **[ST]** 307 **[#]** 213 **[#]** 705 **[#]** 700 **[#]** **[#]**
503 **[#]** 613 **[#]** 601 **[#]** 612 **[#]** 612 **[#]**
213 **[#]** 402 **[#]** **[ST]**
(Address 2, Name changed into: 7-up Small-B)
9 **[ST]** 7 **[#]**
(Address 9 , PLU Group No. changed into: 7)
[AT/TL] (to end this submode)



TEC STORE
1343 PEACH DRIVE
PHONE : 87-6437

Open 8:00am to 7:00pm
Closed: every Wednesday

12-19-1994 MON #3001

PO4

090701
Coke Small-B
#00 090601
#02 7-up Small-B
#09 07

00030

0030

CODING PLUs (supplement to PLU programming operations)

A maximum of 6-digit or 13-digit No. may be assigned to each PLU as PLU Code, depending on the program option selection of the PLU Code digits. Any number within this limit may be assigned to each PLU. The following description is applied to the “Manual PLU Entry System Type”.

DIGIT LENGTH OF PLU CODES

In determining the actual digit length of PLU codes, refer to the following factors:
1) The smaller the digit length, the easier and quicker the PLU sales entries will be.
2) The larger the digit length, the more precise analysis will be possible using various report functions.
3) Some stores may adopt PLU Codes of more than 2 digits (while 1-or 2-digit codes are given to Departments), to prevent confusions or mistakes in key operations.
4) Some stores may use smaller-digit codes for frequently sold PLU items while using larger-digit code for slow-sale items.

CODING METHODS

For the purpose of classifying merchandise and for convenience of PLU report applications, any of the following methods may be taken according to each store's requirement:

1. Coding With Linked Department Code

In this method, the PLU's linked Department Code should be contained in the PLU Code.

ex.) Department Code	Its Linking PLU Codes
1	100, 101, 102, 103 ... 199
12	1200, 1201, 1202, 1203 ... 1299

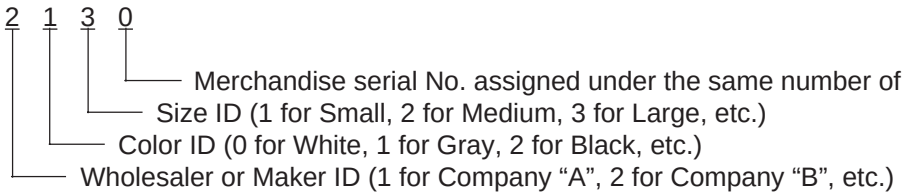
If the linked Department Code is contained in the top 2 digits of the PLU code, as in the above examples, the following merits are expected:

1) The store cashiers and other clerks may easily see each PLU's link Department.
2) In PLU report takings, "Zone PLU Read/Reset"reports are effective, by designating the zone of all the PLUs that link to the same Department.
   ex.) To read all the PLUs linked to Dept. 12:
   Zone-start PLU Code.....1200
   Zone-end PLU Code.....1299
   (For more details, refer to Chapter 5.)

2. Coding With Type ID for Each Digit

This method is to give each digit numeric of the PLU code a certain meaning according to the merchandise, colour, grade, size, wholesaler, etc.

Example using 4-digit code) -- in case of a clothing shop --



3. Using Barcodes (source-marking EAN or UPC barcodes)

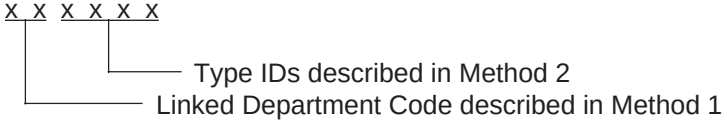
If most of the sale items in the store are printed with a source-marking EAN or UPC barcodes, the code (the human-readable numerics attached to the barcode print) may be entered as it is. Some items are printed with 13-digit code, and others with 8-digit code. Thus this method is possible only when the option "PLU Code max. 13 digits" is selected.

The merit of this system is that you can simply read and enter the source-marked code rather than generating an original code for each PLU item. If the barcode No. is used, however, it is recommended to adopt the "Scanning System Type".

4. Combining Methods 1, 2, and 3

When the option "PLU Code max. 13 digits" is selected, some combinations of the above three methods are possible.

Example 1) Combining Methods 1 and 2:



Example 2) Combining Methods 3, and Method 1 or 2:
For source-marked items ...use the barcodes.
For other items ... generate codes in Method 1 or Method 2, in max. 6 or 7 digits for example.

After all, the methods described above are only suggestions. You may freely make up your own PLU coding method to suit each store's merchandise controls.

6.10 TIME SETTING OR ADJUSTMENT (Submode 5)

CONDITION — Any time outside a sale

OPERATION — Mode Lock: SET

5 **[@/FOR]** → |Hour| (0 to 23) |Minute| (00 to 59) → **[AT/TL]**

ex.) To set the time to "1:35 p.m. (13:35)":
Mode Lock to SET, enter 5, depress **[@/FOR]**.
Enter 1335, depress **[AT/TL]**.

NOTE: *If an hour value of more than 23 or a minute value of more than 59 is entered, it will result in an error. The current date will not be changed by setting or adjusting the time.*

```
TEC STORE
1343 PEACH DRIVE
PHONE : 87-6437

Open  8:00am to 7:00pm
Closed: every Wednesday

12-19-1994  MON #3001

P05

13:35TM

0032
```

6.11 DATE SETTING OR ADJUSTMENT (Submode 6)

CONDITION — Any time outside a sale

OPERATION — Mode Lock: SET

6 **[@/FOR]** → |Day-of-Week Code| |Month| (01 to 12) |Day| (01 to 31) |Year| (94, 95, etc.) → **[AT/TL]**

0: SUN (Sunday)
1: MON (Monday)
2: TUE (Tuesday)
3: WED (Wednesday)
4: THU (Thursday)
5: FRI (Friday)
6: SAT (Saturday)

ex.) To set the date to Monday, December 19, 1994:
Mode Lock: SET, enter 6, depress **[@/FOR]**
Enter 112191994, depress **[AT/TL]**

NOTES: *1. The date entry order may be Day-Month-Year or Year-Month-Day instead of Month-Day-Year if so selected in the program option.*

```
TEC STORE
1343 PEACH DRIVE
PHONE : 87-6437

Open  8:00am to 7:00pm
Closed: every Wednesday

11-14-1994  MON #3001

P06

1 12-19-1994

0033
```

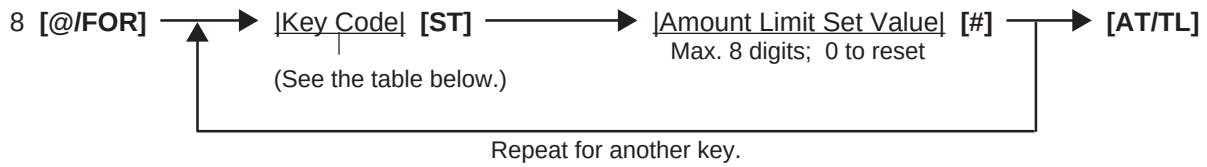
2. The Day-of-week is programmable not to be printed on receipts.

6.12 AMOUNT LIMIT SETTING FOR FUNCTION KEYS (Submode 8)

This submode sets the high amount limit in finalizing transactions by tendering through each media key and also sets the high and low amount limits in entering amount through departments.

CONDITION Any time outside a sale

OPERATION Mode Lock: SET



Key Code	Item or Key to be applied
1	**[AT/TL]** (Cash Tender)
2	**[CHK TND]** (Check Tender)
3	**[Chg]** (Chg Tender)
4	**[MISC]** (Misc. Tender)
5	**[CPN]** (Media-Coupon Tender)
6	**[CREDIT 1]** (Credit 1 Tender)

Key Code	Item or Key to be applied
7	**[CREDIT 2]** (Credit 2 Tender)
8	**[CREDIT 3]** (Credit 3 Tender)
9	**[CREDIT 4]** (Credit 4 Tender)
10	**[FSTL TEND]** (Food Stamp Tender)
11	Common High Limit for all depts.
12	Common Low Limit for all depts.

ex.) To set the Amount Limits of the following items:

Key Code	Amount Limit	Set Value
2 (**[CHK TND]**)	$99,99	9999
11 (Common High)	$999,99	100000
12 (Common Low)	$0,01	1

Mode Lock: SET, 8 **[@/FOR]**
2 **[ST]** (Item Code for Check Media Key) 9999 **[#]**
11 **[ST]** 100000 **[#]** (Common High Limit for all depts.)
12 **[ST]** 1 **[#]** (Common Low Limit for all depts.)
[AT/TL]

```
        TEC STORE
     1343 PEACH DRIVE
      PHONE : 87-6437

Open  8:00am to 7:00pm
Closed: every Wednesday

12-19-1994  MON #3001

          P08

#02 CHECK          99,99
#11              1000,00
#12                 0,01

               037
```

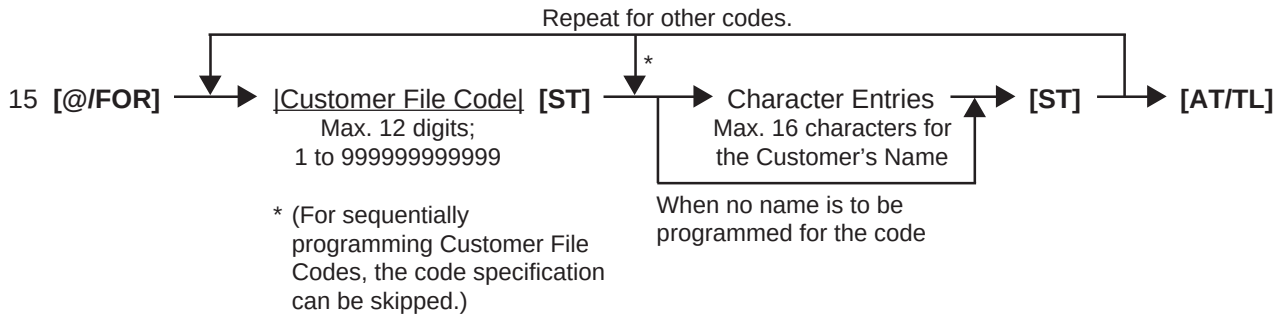
NOTES: *1. If the individual High or Low Amount Limit of a department has been set, it prevails over the Common High or Low Limit for all departments here.*
2. The Amount Limit Set Value of each tender media is the high amount limit and is effective only when the media key is used for tendering but not when used as total key.

6.13 CUSTOMER FILE CODE (CHECK TRACK NO.) AND NAME SETTING (Submode 15)

This submode creates files for customers whose sales are to be processed using the check track memory.

CONDITION Any time outside a sale

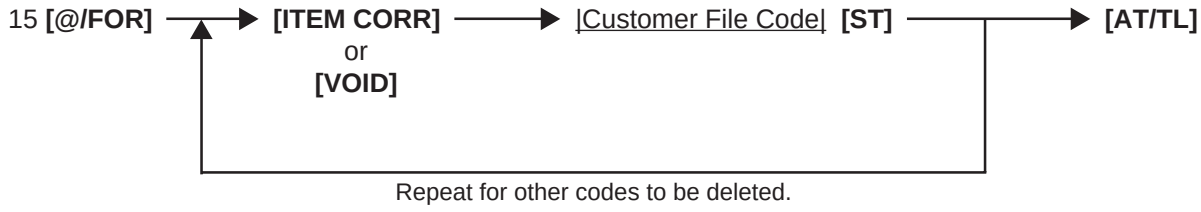
OPERATION Mode Lock: SET



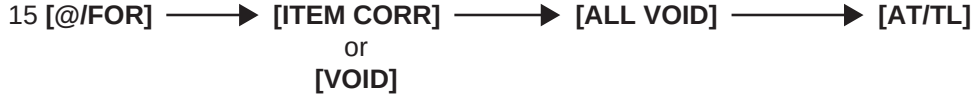
NOTES:

1. *The Customer File codes that are programmed in this submode will be accessed by entering the code and depressing the **[PICK UP BAL]** key for a sale entry in a charge posting operation in the REG or MGR mode. At this time, the balance of the new customer assigned with the code will show zero which will be printed as the previous balance line. On finalizing the sale, the new balance will be printed at the bottom of the receipt, which will be stored in the same Customer File Code memory area. Thus the operator always use the **[PICK UP BAL]** key for both starting a new customer's account and at recalling the customer's balance.*
2. *If all the programmed Customer File Codes are used up and a new customer file code is required to be opened during the business hours, the **[CODE OPEN]** key may be used. When a new code is entered, followed by **[CODE OPEN]**, the code is printed as the previous balance line item with the balance zero on the receipt, and at the same time, the code is added to the list of the Customer File Codes programmed in the above operation of Submode 15. However, the use of the **[CODE OPEN]** key can be programmed to require Manager Intervention, which can control the operator's opening of a new customer file code outside the list of the Customer File Codes programmed in Submode 15.*
3. *When the Standard Memory is used, a maximum of 1.000 Customer File Codes can be programmed. When the Expansion Memory is used, a maximum of 3.000 Customer File Codes can be programmed. However, the actual maximum number of the files varies depending on RAM Allocation.*

Deletion of Individual Customer File Codes



Deletion of All Customer File Codes



NOTE: *If the balance of the deleted code is not zero, the Transfer memory of the code will automatically be adjusted to zero. At that time, the previous balance to be reset will be printed.*

ex.) To program the following Customer File Codes with Customer Names:

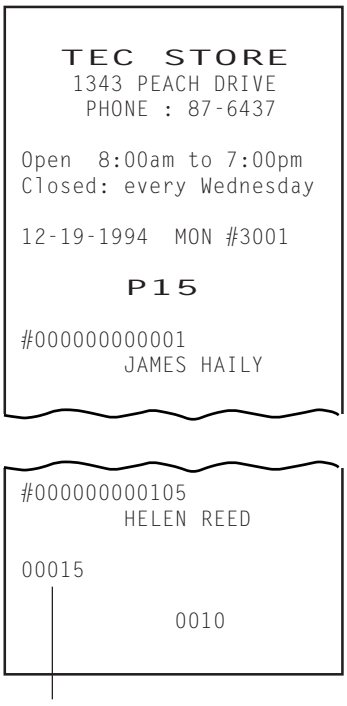
CODE	NAME
1	JAMES HAILY
⋮	
105	HELEN REED

Mode Lock: SET
Enter 15, depress **[@/FOR]**.

1 **[ST]** (Customer File Code)
410 **[#]** 401 **[#]** 413 **[#]**
405 **[#]** 503 **[#]** **[#]** 408 **[#]**
401 **[#]** 409 **[#]** 412 **[#]**
509 **[#]** **[ST]**
(NAME: JAMES HAILY)
⋮

105 **[ST]** (Customer File Code)
408 **[#]** 405 **[#]** 412 **[#]**
405 **[#]** 414 **[#]** **[#]** 502 **[#]**
405 **[#]** 405 **[#]** 404 **[#]** **[ST]**
(NAME: HELEN REED)

[AT/TL]


TEC STORE
1343 PEACH DRIVE
PHONE : 87-6437

Open 8:00am to 7:00pm
Closed: every Wednesday

12-19-1994 MON #3001

P15

#000000000001
JAMES HAILY

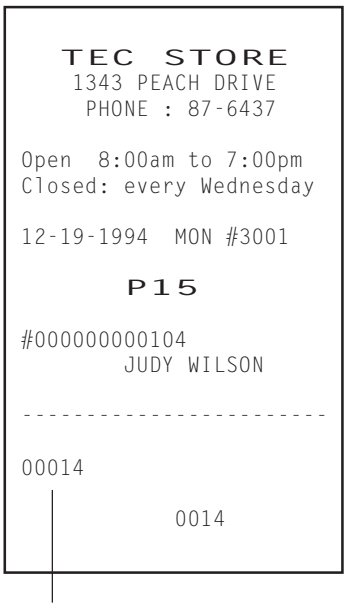
#000000000105
HELEN REED

00015

0010

Number of Customer Files opened

ex.) To delete Customer File Code 104 that has once been programmed:
Mode Lock: SET
Enter 15, depress **[@/FOR]**.
[ITEM CORR] 104 **[ST]** (Customer File Code)
[AT/TL]


TEC STORE
1343 PEACH DRIVE
PHONE : 87-6437

Open 8:00am to 7:00pm
Closed: every Wednesday

12-19-1994 MON #3001

P15

#000000000104
JUDY WILSON

00014

0014

Number of Customer Files remaining opened

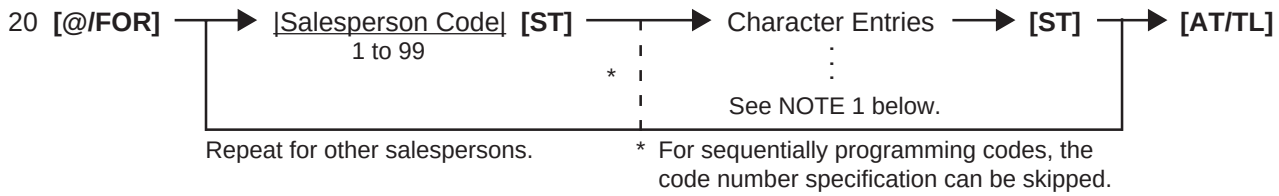
6.14 SALESPERSON CODE AND NAME PROGRAMMING (Submode 20)

By programming Salesperson Codes here, those codes may be used in sales entries. In addition, the name of each salespersons can be programmed in maximum 12 characters.

Programming

CONDITION Any time outside a sale

OPERATION Mode Lock: SET



NOTES:
1. *A maximum of 12 regular-sized or 6 double-sized characters may be programmed for a name. A combination of both types is also available.*
2. *Even if no name is programmed (i.e. skipping the Character Entries before the second **[ST]** key) for a Salesperson Code, that code can be used in sale entries. Then, auto-preset ID symbol "S P xx" (xx = Salesperson Code) will be printed instead of a name on a receipt, etc.*

ex.) To program the following Salesperson Codes and names:

CODE	NAME
1	White
2	Stacy
3	Jansen

Mode Lock: SET
20 **[@/FOR]**.

1 **[ST]** (Salesperson Code 1)
507 **[#]** (W)
608 **[#]** (h)
609 **[#]** (i)
704 **[#]** (t)
605 **[#]** (e) **[ST]**
2 **[ST]** (Salesperson Code 2)
503 **[#]** (S)
704 **[#]** (t)
601 **[#]** (a)
603 **[#]** (c)
709 **[#]** (y) **[ST]**
3 **[ST]** (Salesperson Code 3)
410 **[#]** (J)
601 **[#]** (a)
614 **[#]** (n)
703 **[#]** (s)
605 **[#]** (e)
614 **[#]** (n) **[ST]**

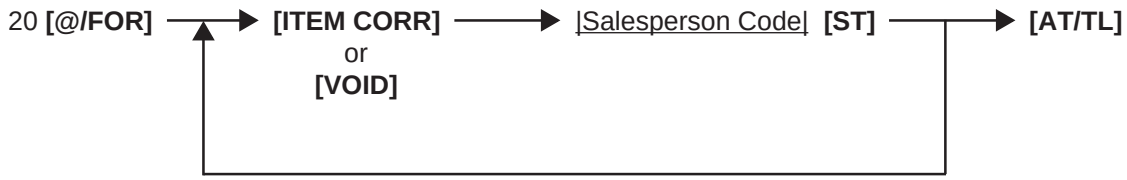
[AT/TL]

```
        TEC STORE
    1343 PEACH DRIVE
     PHONE : 87-6437

Open  8:00am to 7:00pm
Closed: every Wednesday

12-19-1994  MON #3001

          P20

01 White
02 Stacy
03 Jansen

              0047
```

Deletion

CONDITION After Daily Salesperson Reset

OPERATION Mode Lock: SET



NOTE: *When a Salesperson Code is deleted in the above operation, no entries using that code will be accepted until the code is again opened in the "Programming" operation already described.*

ex.) To delete Salesperson Code 3 (name: Jansen) that was once programmed:
Mode Lock: SET, 20 **[@/FOR]**.
[ITEM CORR] 3 **[ST]**
[AT/TL]

```
        TEC STORE
     1343 PEACH DRIVE
      PHONE : 87-6437

Open  8:00am to 7:00pm
Closed: every Wednesday

12-19-1994  MON #3001

          P20

03 Jansen
------------------------

              0048
```

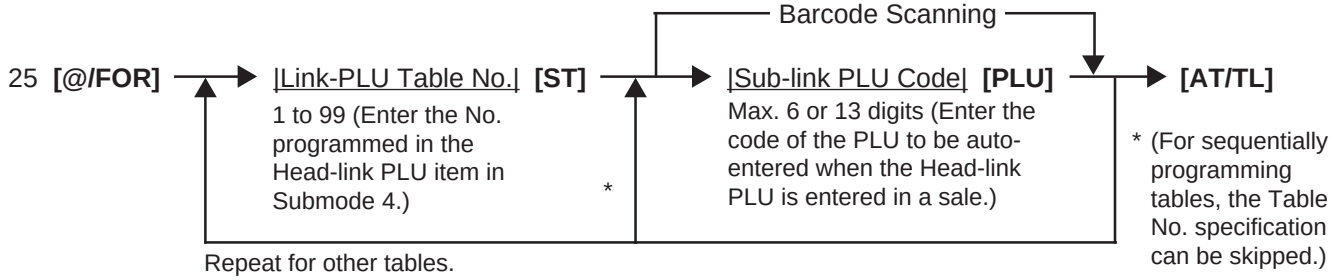
6.15 LINK-PLU TABLE PROGRAMMING (Submode 25)

This submode programs Link-PLU Tables and their respective Sub-link PLUs. When a PLU is programmed with a Link-PLU Table No. (Address 10 of the PLU TABLE PROGRAMMING operation), an entry of the PLU will automatically enter the Sub-link PLU that is programmed in the Link-PLU Table No. Refer to the "Link-PLU Table No." description in the PLU TABLE PROGRAMMING, Submode 4, as to details of PLU-to-PLU linkage.

Programming

CONDITION Any time outside a sale

OPERATION Mode Lock: SET



ex.) To set the following Link-PLU Table and its Sub-link PLU:

Link-PLU Table No.	Sub-link PLU Code
1	101301

Mode Lock: SET, 25 **[@/FOR]**
1 **[ST]** 101301 **[PLU]** **[AT/TL]**

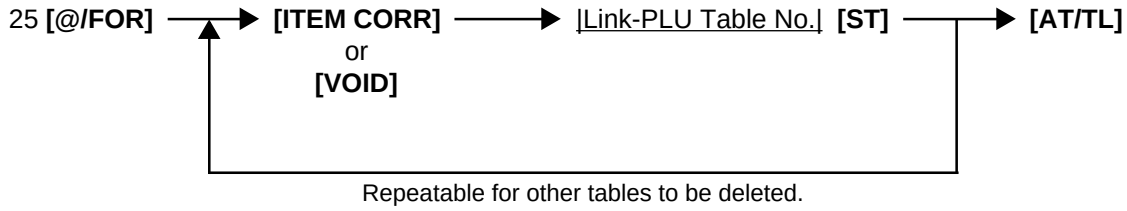
NOTE: *In this example, Link-PLU Table No. has already been set in PLU 90601 (Coke Small-B) and PLU 90701 (7-up Small-B) as Head-link items in the PLU PROGRAMMING operation, Submode 4, The Sub-link PLU 101301 here has been programmed as a bottle-deposit PLU (Small-Btl Depo) in the same submode.*

```
TEC STORE
1343 PEACH DRIVE
PHONE : 87-6437

Open  8:00am to 7:00pm
Closed: every Wednesday

12-19-1994  MON #3001

P25

#01 101301

0055
```

Deletion of Link-PLU Tables

CONDITION — Any time outside a sale

OPERATION — Mode Lock: SET

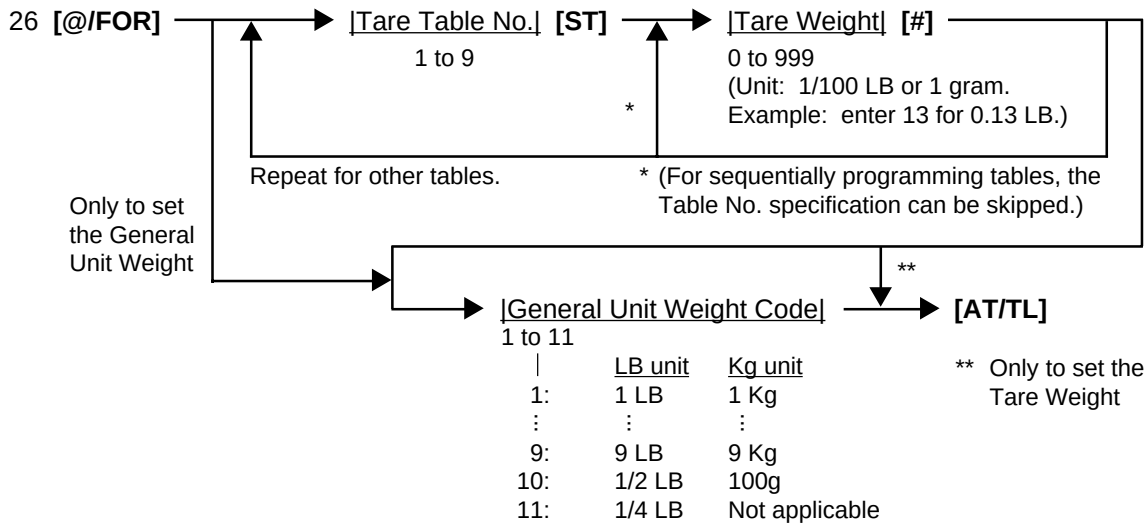


6.16 TARE TABLE AND GENERAL UNIT WEIGHT SETTING (Submode 26)

In the PLU TABLE PROGRAMMING operation (Submode 4), some of Scale-compulsory PLUs may be set with a Tare Table No. The actual tare weight is set to each Tare Table here. Also, the General Unit Weight is set here so that the Unit Weight may be effective to scale items entered through departments or PLUs without any Individual Unit Weight designation.

CONDITION — Any time outside a sale

OPERATION — Mode Lock: SET



	LB unit	Kg unit
1:	1 LB	1 Kg
⋮	⋮	⋮
9:	9 LB	9 Kg
10:	1/2 LB	100g
11:	1/4 LB	Not applicable

ex.) To set the following:
Tare Table No. 1 with Tare Weight 0.13LB, General Weight 2LB (Code 2).
Mode Lock: SET, 26 **[@/FOR]**
1 **[ST]** 13 **[#]** 2 **[AT/TL]**

```
TEC STORE
1343 PEACH DRIVE
PHONE : 87-6437

Open  8:00am to 7:00pm
Closed: every Wednesday

12-19-1994  MON #3001

P26

#1              0.13LB

                  2LB

          0037
```

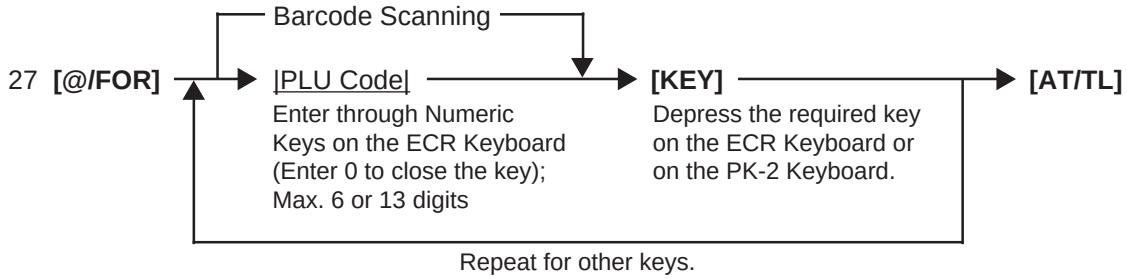
NOTE: *The initial value for the General Unit Weight is set to Code 1 (1LB or 1Kg).*

6.17 PLU PRESET-CODE KEY SETTING (Submode 27)

When there are any keys programmed as PLU Preset-code Keys on the ECR Keyboard (Ordinary or Flat Type), and/or when the PLU Keyboard PK-2 (hardware option) is connected to the ECR, a PLU code may be preset to each of those keys in this operation.

CONDITION Any time outside a sale

OPERATION Mode Lock: SET



ex.) To set the following PLU Codes to KEYs on the ECR keyboard:

PLU Code	Mode Lock: SET 27 **[@/FOR]**.
50321	50321 **[required key]**
50322	50322 **[required key]**
	[AT/TL]

Location Code (left side); refer to REMARKS 1 and 2 on the next page.
PLU Code assigned to the key (right side)

```
TEC STORE
1343 PEACH DRIVE
PHONE : 87-6437

Open  8:00am to 7:00pm
Closed: every Wednesday

12-19-1994  MON #3001

P27

#073 0000000050321
#074 0000000050322

          0017
```

NOTES:
1. *If the PLU Code entry is skipped and a **[KEY]** is simply depressed in the above sequence, the preprogrammed PLU Code of the KEY will be displayed.*
2. *A non-opened PLU Code (i.e. PLU non-existent in the PLU table file) can be set on a KEY; however, pressing the KEY in sale entries will result in an error unless the code is opened in the PLU TABLE PROGRAMMING operation, Submode 4.*
3. *If "0" is entered as PLU Code in the above sequence, the KEY will be closed. Pressing the closed KEY in sale entry will cause an error.*

PK-2 KEYBOARD

1	11	21	31	41	51	61	71	81	91	101	111	121
2	12	22	32	42	52	62	72	82	92	102	112	122
3	13	23	33	43	53	63	73	83	93	103	113	123
4	14	24	34	44	54	64	74	84	94	104	114	124
5	15	25	35	45	55	65	75	85	95	105	115	125
6	16	26	36	46	56	66	76	86	96	106	116	126
7	17	27	37	47	57	67	77	87	97	107	117	127
8	18	28	38	48	58	68	78	88	98	108	118	128
9	19	29	39	49	59	69	79	89	99	109	119	129
10	20	30	40	50	60	70	80	90	100	110	120	130

REMARKS:
1. *The Nos 1 through 130 marked on the PK-2 Keyboard are the KEY Nos to be printed on the left side of the program receipt issued in the operation on the preceding page. If each KEY is not set with a PLU Code, the auto-preset PLU Code identical to the initial KEY No. in the above figure will be active as its preset PLU Code*
   ex.) KEY No.1 ..... PLU Code 1
   KEY No.130 ..... PLU Code 130
2. *When a PLU code is assigned to a PLU Preset-code Key on the ECR Keyboard in the operation on the preceding page, the Hardware Key Code which indicates the absolute location of the key will be printed to the left of the assigned PLU Code.*
   The Hardware Key Codes of the ECR keyboards of Ordinary Type and Flat Type are shown on the next page.

ECR Ordinary Type Keyboard

1	7	13	19	25	31	37	43	49	55	61	67	73	79	85
2	8	14	20	26	32	38	44	50	56	62	68	74	80	86
3	9	15	21	27	33	39	45	51	57	63	69	75	81	87
4	10	16	22	28	34	40	46	52	58	64	70	76	82	88
5	11	17	23	29	35	41	47	53	59	65	71	77	83	89
6	12	18	24	30	36	42	48	54	60	66	72	78	84	90

ECR Flat Type Keyboard

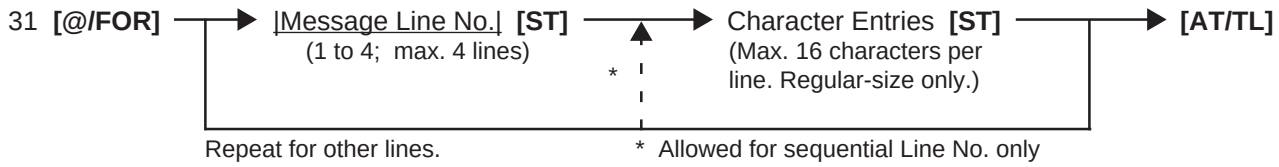
<table>
<tr><td>1</td><td>8</td><td>15</td><td>22</td><td>29</td><td>36</td><td>43</td><td>50</td><td>57</td><td>64</td><td>71</td><td>78</td><td>85</td><td>92</td><td>99</td><td>104</td><td>110</td><td>117</td><td>124</td><td>129</td><td>136</td><td>139</td></tr>
<tr><td>2</td><td>9</td><td>16</td><td>23</td><td>30</td><td>37</td><td>44</td><td>51</td><td>58</td><td>65</td><td>72</td><td>79</td><td>86</td><td>93</td><td rowspan="2">100</td><td>105</td><td>111</td><td>118</td><td>125</td><td>130</td><td>137</td><td>140</td></tr>
<tr><td>3</td><td>10</td><td>17</td><td>24</td><td>31</td><td>38</td><td>45</td><td>52</td><td>59</td><td>66</td><td>73</td><td>80</td><td>87</td><td>94</td><td colspan="2">112</td><td>119</td><td>126</td><td>131</td><td>138</td><td>141</td></tr>
<tr><td>4</td><td>11</td><td>18</td><td>25</td><td>32</td><td>39</td><td>46</td><td>53</td><td>60</td><td>67</td><td>74</td><td>81</td><td>88</td><td>95</td><td>101</td><td>106</td><td>113</td><td>120</td><td rowspan="2">127</td><td>132</td><td colspan="2">142</td></tr>
<tr><td>5</td><td>12</td><td>19</td><td>26</td><td>33</td><td>40</td><td>47</td><td>54</td><td>61</td><td>68</td><td>75</td><td>82</td><td>89</td><td>96</td><td>102</td><td>107</td><td>114</td><td>121</td><td>133</td><td colspan="2">143</td></tr>
<tr><td>6</td><td>13</td><td>20</td><td>27</td><td>34</td><td>41</td><td>48</td><td>55</td><td>62</td><td>69</td><td>76</td><td>83</td><td>90</td><td>97</td><td rowspan="2">103</td><td>108</td><td>115</td><td>122</td><td rowspan="2">128</td><td>134</td><td colspan="2">144</td></tr>
<tr><td>7</td><td>14</td><td>21</td><td>28</td><td>35</td><td>42</td><td>49</td><td>56</td><td>63</td><td>70</td><td>77</td><td>84</td><td>91</td><td>98</td><td>109</td><td>116</td><td>123</td><td>135</td><td colspan="2">145</td></tr>
</table>

6.18 DISPLAY MESSAGE PROGRAMMING (Submode 31)

The “DISPLAY MESSAGE” here means the message to be displayed in the 16-digit dot windows of the Operator Display panel (and Customer Display panel if the 16-digit dot windows are installed as hardware option) while the Mode Lock of the terminal is in the “LOCK” position. This display message may be used as information, commercial message, welcoming greeting, etc.

CONDITION Any time outside a sale

OPERATION Mode Lock: SET



NOTES:
1. *When the option “Store Message SCROLLING DISPLAY” is selected, four lines (Line Nos 1 to 4) are available. Even when the option “Store Message 16 CHARACTERS HELD” is selected, four lines (Line Nos 1 to 4) are available.*
   In this case, refer to “Store Message Display” operation to display the respective message lines.
2. *When the “SCROLLING DISPLAY” option is selected, a maximum of 64 characters can be entered consecutively after designating Line No.1 at first and depressing **[ST]** for each line end.*
3. *The character must be regular-sized only.*
4. *The DISPLAY MESSAGE set here will also appear in the REG or MGR mode if so designated by program option.*

ex.) To program the following display message under the “SCROLLING DISPLAY” option:

THIS COUNTER IS	Line No. 1
CLOSED. PLEASE	Line No. 2
GO TO ANOTHER, T	Line No. 3
HANK YOU...	Line No. 4

OPERATION: Mode Lock; SET, enter 31, depress **[@/FOR]**.

1 **[ST]** (Line No.1)

504 **[#]** (T)
408 **[#]** (H)
409 **[#]** (I)
503 **[#]** (S)
[#] (space)
403 **[#]** (C)
415 **[#]** (O)
505 **[#]** (U)
414 **[#]** (N)
504 **[#]** (T)
405 **[#]** (E)
502 **[#]** (R)
[#] (space)
409 **[#]** (I)
503 **[#]** (S)
[#] (space)

[ST] (to complete Line 1)

(2 **[ST]**) (Line No. 2)

403 **[#]** (C)
412 **[#]** (L)
415 **[#]** (O)
503 **[#]** (S)
405 **[#]** (E)
404 **[#]** (D)
214 **[#]** (.)
[#] (space)
[#] (space)
500 **[#]** (P)
412 **[#]** (L)
405 **[#]** (E)
401 **[#]** (A)
503 **[#]** (S)
405 **[#]** (E)
[#] (space)

[ST] (to complete Line 2)

(3 **[ST]**) (Line No. 3)

407 **[#]** (G)
415 **[#]** (O)
[#] (space)
504 **[#]** (T)
415 **[#]** (O)
[#] (space)
401 **[#]** (A)
414 **[#]** (N)
415 **[#]** (O)
504 **[#]** (T)
408 **[#]** (H)
405 **[#]** (E)
502 **[#]** (R)
212 **[#]** (,)
[#] (space)
504 **[#]** (T)
[ST] (to complete Line 3)

(4 **[ST]**) (Line No. 4)

408 **[#]** (H)
401 **[#]** (A)
414 **[#]** (N)
411 **[#]** (K)
[#] (space)
509 **[#]** (Y)
415 **[#]** (O)
505 **[#]** (U)
214 **[#]** (.)
214 **[#]** (.)
214 **[#]** (.)

[ST] (to complete Line 4)

[AT/TL] (to complete this submode)

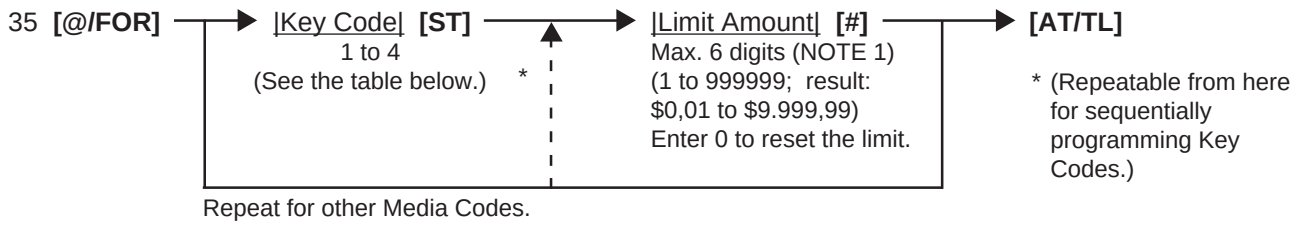
```
      TEC STORE
    1343 PEACH DRIVE
     PHONE : 87-6437

Open  8:00am to 7:00pm
Closed: every Wednesday

12-19-1994  MON #3001

        P31

1
 THIS COUNTER IS
2
 CLOSED.  PLEASE
3
 GO TO ANOTHER, T
4
 HANK YOU...

             0062
```

6.19 NEGATIVE AMOUNT KEY LIMIT AMOUNT SETTING (Submode 35)

This submode sets the limit amount to be entered through each of the negative-amount keys **[VND CPN]**, **[STR CPN]**, **[BTL RTN]**, and **[DOLL DISC]**.

CONDITION — Any time outside a sale

OPERATION — Mode Lock: SET



KEY CODE AND KEY TABLE

Key Code	Key
1	**[VND CPN]**
2	**[STR CPN]**
3	**[BTL RTN]**
4	**[DOLL DISC]**

ex.) To set High Limit Amounts for the respective keys below:

Key	Key Code	High Limit
[VND CPN]	1	$10,00
[STR CPN]	2	$20,00
[BTL RTN]	3	$1,20
[DOLL DISC]	4	$1,00

Mode Lock: SET
35 **[@/FOR]**
1 **[ST]**
1000 **[#]**
(2 **[ST]**)
2000 **[#]**
(3 **[ST]**)
120 **[#]**
(4 **[ST]**)
100 **[#]**
[AT/TL]

```
        TEC STORE
     1343 PEACH DRIVE
      PHONE : 87-6437

Open  8:00am to 7:00pm
Closed: every Wednesday

12-19-1994  MON #3001

          P35

V.CPN            $10,00
S.CPN            $20,00
BTR               $1,20
DISC              $1,00

              0066
```

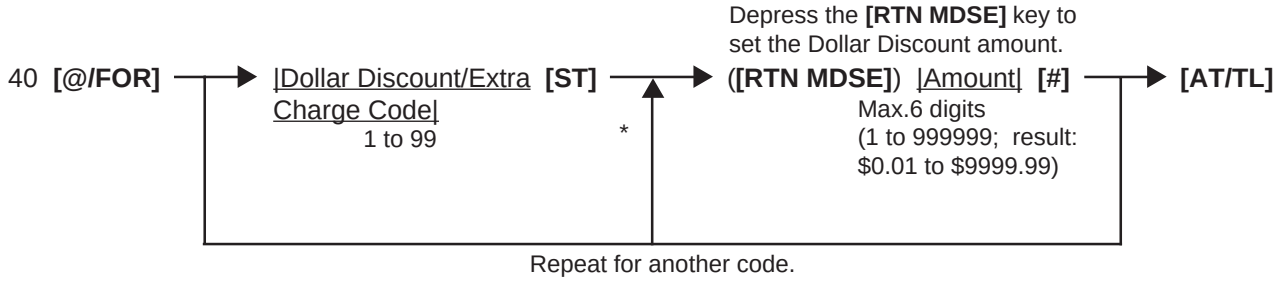
NOTES:
1. *The **[VND CPN]** key will not be restricted by the limit amount set here but the amount up to 7 digits will be entered in MGR or ⊟ mode.*
2. *The limit set here cannot be released by the **[LC OPEN]** (or **[OPEN]**) key in transaction entries.*

6.20 PLU UNIT PRICE DOLLAR DISCOUNT/EXTRA CHARGE AMOUNT SETTING (Submode 40)

This submode sets the dollar discount amount or the extra charge amount for PLU price.

CONDITION Any time outside a sale

OPERATION Mode Lock: SET



* (Repeatable from here for sequentially programming Dollar Discount/Extra Charge Codes.)

ex.) To set as follows:
- Code 2 for Dollar Discount $1.50
- Code 10 for Extra Charge $2.00

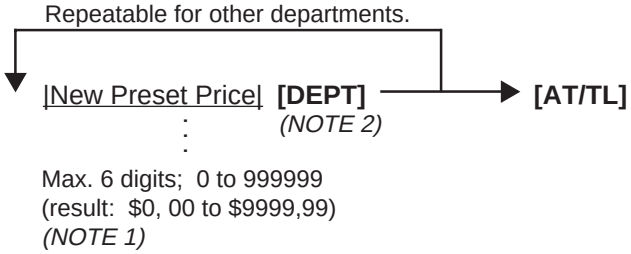
Mode Lock: SET, 40 **[@/FOR]**
2 **[ST] [RTN MDSE]** 150 **[#]** 10 **[ST]** 200 **[#] [AT/TL]**

6.21 DEPARTMENT PRESET PRICE SETTING OR CHANGING

A price of each department may be set or changed by this operation.

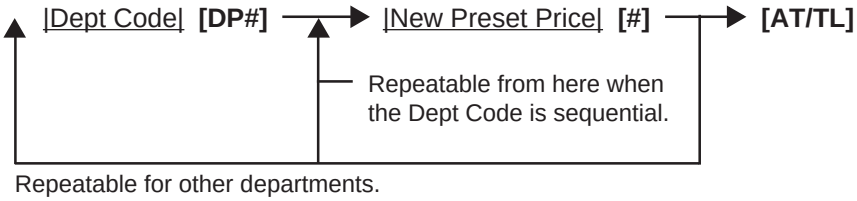
CONDITION Any time outside a sale

OPERATION Mode Lock: SET



NOTES:
1. *With the option "Preset Point for one decimal digit allowed", 0 to 99999,9 (result: $0,000 to $999,999), using the **[.]** key.*
2. *The "**[DEPT]** "here indicates a Department Preset-code Key. When the **[DP#]** key is used, see the operation below.*

Using the **[DP#]** Key:



*To change a preset-price department into an open department, skip the "New Preset Price" entry and simply depress the **[DEPT]** key (in the first operation pattern) or simply depress the **[#]** key (in the second operation pattern). Presetting a zero-price is also possible.*

ex.) To set the following preset prices of departments:
Dept. 13 ..... $1,40
Dept.14 ..... $2,10

OPERATION: Mode Lock: SET

By the first operation pattern:
140 **[DEPT 13]**
210 **[DEPT 14]**

By the second operation pattern:
13 **[DP#]** 140 **[#]**
(14 **[DP#]**) 210 **[#]**

[AT/TL]

```
        TEC STORE
     1343 PEACH DRIVE
      PHONE : 87-6437

Open  8:00am to 7:00pm
Closed: every Wednesday

12-19-1994  MON #1

          POO

13DP13
                    1,40@
14DP14
                    2,10@

              0083
```

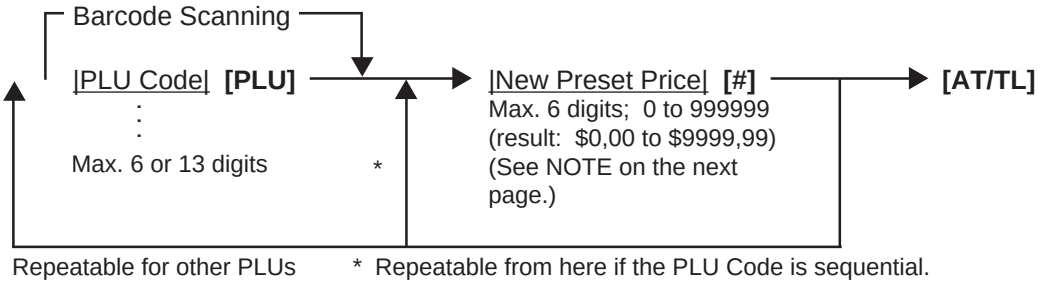
6.22 PLU PRESET PRICE SETTING OR CHANGING, WHOLE PACKAGE QUANTITY CHANGING

The preset price of each PLU may be set in the PLU TABLE PROGRAMMING (Submode 4) already described. However, in setting or changing the price and/or the whole package quantity only but not other programmed data, the following operation will be more convenient.

Setting or Changing Preset Price

CONDITION — Any time outside a sale

OPERATION — Mode Lock: SET



ex.) To set the following preset prices of PLUs:

	Old Price	New Price
PLU 110501 (Potato Chips)	$1,50	$1,55
PLU 120501 (Nutmeg)	$0,60	$0,65

OPERATION: Mode Lock: SET

110501 **[PLU]**
155 **[#]**
120501 **[PLU]**
65 **[#]**

[AT/TL]

```
TEC STORE
1343 PEACH DRIVE
PHONE : 87-6437

Open  8:00am to 7:00pm
Closed: every Wednesday

12-19-1994  MON #1

POO

110501
Potato Chips      1,55@
120501
Nutmeg            0,65@

          0086
```

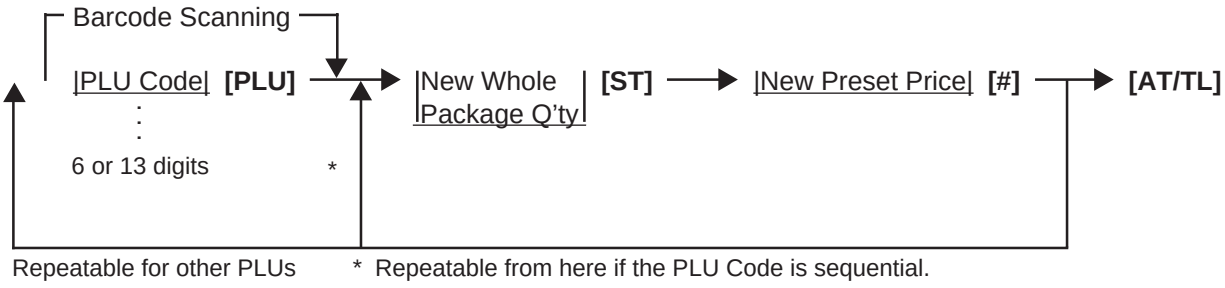
NOTE: *With the option "Preset Point for one decimal digit allowed," 0 to 99999,9 (result: $0,000 to $999,999) using the **[.]** key.*

*To change a preset-price PLU into an open-price PLU, skip the "New Preset Price" entry and simply depress the **[#]** key. Presetting a zero-price is also possible.*

Setting or Changing Preset Price of Split Package Pricing PLU

CONDITION Any time outside a sale

OPERATION Mode Lock: SET



ex.) To set the following preset prices of PLUs:

	New Whole Package Q'ty	New Preset Price
PLU 20105 (Apple)	6	$1,25

OPERATION: Mode Lock: SET

20105 **[PLU]** 6 **[ST]** 125 **[#]** **[AT/TL]**

```
TEC STORE
1343 PEACH DRIVE
PHONE : 87-6437

Open  8:00am to 7:00pm
Closed: every Wednesday

12-19-1994  MON #1

POO

020105              /6
Apple            1.25@

          0088
```

6.23 %+ AND %- PRESET RATE SETTING

A preset rate may be set on each of the **[%+]** and **[%-]** keys, one independent rate for each key. Once a rate is preset, the % key will simply be depressed without a prior rate entry to activate the preset rate. If a rate is entered prior to the depression of the key, the entered rate (manual rate) will be activated instead.

CONDITION Any time outside a sale

OPERATION Mode Lock: SET

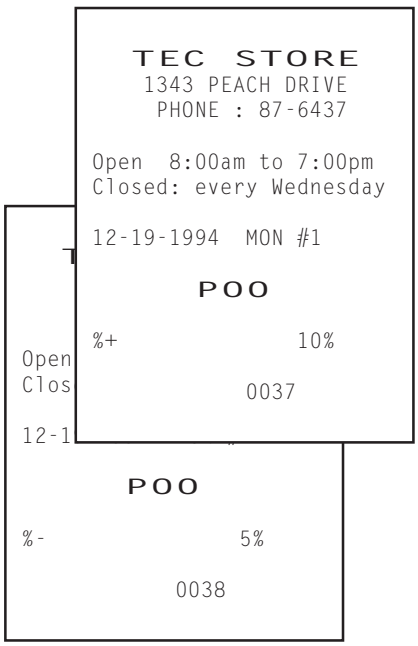
|Preset Rate| **[%+]** (For Percent Charge Preset Rate)

⋮

(0,001 to 99,999 (%);
use the **[.]** key if a decimal portion is contained.)

⋮

|Preset Rate| **[%-]** (For Percent Discount Preset Rate)



ex.) To set 10% on **[%+]** Key:
Mode Lock: SET, enter 10, depress **[%+]**.

ex.) To set 5% on **[%-]** Key:
Mode Lock: SET, enter 5, depress **[%-]**.

To reset the rate once set:
Enter 0, depress the required % key.
(Then the % key will always require a manual rate entry in sale entries.)

NOTE: *When two **[%+]** keys or two **[%-]** keys are installed on the keyboard, two different % rates (one for each) may be preset, in the same manner as described above. The two rates may be the same or different from the other. Or only one key may be preset with a rate and other may remain non-preset.*

6.24 PRESET RATE SETTING FOR SELECTIVE ITEMIZERS (SI1 and SI2)

If any of **[ST1/TL]** (or **[SI/TL]**) and **[SI2/TL]** keys are installed on the keyboard, a preset rate may be programmed on each key.
As for the functions and applications of the Selective Itemizers, refer to the description below.

CONDITION Any time outside a sale

OPERATION Mode Lock: SET

|Preset Rate of SI 1| ⟶ **[SI1/TL]** (or **[SI/TL]**)

⋮

(0,001 to 99,999 (%);
use the **[.]** key if a decimal portion is contained.)

⋮

|Preset Rate of SI 2| ⟶ **[SI2/TL]**

ex.) To set 7% as SI 1 preset % rate:
Mode Lock: SET
7 **[ST1/TL]**

```
        TEC STORE
    1343 PEACH DRIVE
     PHONE : 87-6437

Open  8:00am to 7:00pm
Closed: every Wednesday

12-19-1994  MON #1

        POO

SI1TL            7%

            0043
```

NOTES:
1. *Whether the calculated amount by the preset SI % rate affects (i.e. add to or subtract from) the sale total is determined by a program option.*
2. *To reset the rate once set, enter 0 as the rate. (Then the rate is regarded as 100% if the option "Non-affect" is selected. With the option "SI Affects Sale Total", some rate other than "0" should be programmed.)*

Selective Itemizer Functions and Applications

The "Selective Itemizer" is a temporary total memory for each sale and is activated separately from the Main Itemizer (i.e. sale total memory). If certain Department or PLU items are programmed with the SI (selective itemizer) "net" status, the Selective Itemizer will function to add up amounts of the SI-net status items in registering the items, while the Main Itemizer will function to add up all the items in the sale. Thus, near the sale finalization, the operator may read the SI content by depressing the **[SI/TL]** key.

A preset % rate may be programmed for each of SI1 and SI2 (on the preceding page), and whether the calculated amount will add to, subtract from, or non-affect the sale total is a program option. Whether the amount resulted by depressing the **[SI/TL]** key will print or non-print is another program option.

The applications of this function may vary from store to store. Some stores may use it for counting the service stamps to be issued to the customers according to the sale amount of service-stampable items. In this case, the option "SI Total Non-affects Sale Total" should be selected, and a preset % rate, 1% for example, may be set to issue one service stamp for every $1,00. Thus the number of stamps to be issued to the customer is displayed (and printed if so programmed) as a result of calculation with the preset % rate, but the resulted value (the number of stamps in this case) will not affect the sale total.

Example 1) With option "SI Total Non-affects Sale Total":

Key Operation in REG Mode

100 **[DEPT 1]** (SI-net)
150 **[DEPT 2]** (non-SI)
200 **[DEPT 3]** (SI-net)
[SI/TL] (1% is preset)
[AT/TL]

Receipt/Journal Print

```
DP01          1,00 S
DP02          1,50
DP03          2,00 S
SI TL         0,03
CASH          4,50
```

"S": SI-net Symbol

Number of stamps to be issued.

Dept. 1 and Dept. 3 are programmed with SI-net-status. On depressing **[SI/TL]**, "0,03" (which is 1% of total amount of Dept. 1 "1,00" + Dept. 3 "2,00") is displayed and printed, and 3 stamps are to be issued to the customer in this case. The sale total "4,50," is not affected by the SI calculation.

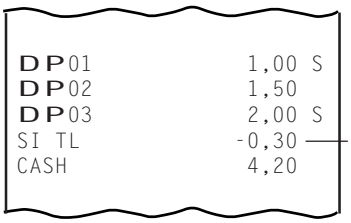
Other stores may use it for calculating the discount amount for certain sales items during a special discount sales period by presetting the discount % rate on the SI and programming SI-net status to certain Departments and PLUs which are subject to the special discount.

Example 2) With option "SI Special Discount":

Key Operation in REG Mode

100 **[DEPT 1]** (SI-net)
150 **[DEPT 2]** (non-SI)
200 **[DEPT 3]** (SI-net)
[SI/TL] (10% is preset)
[AT/TL]

Receipt/Journal Print



On depressing **[SI/TL]**, "-0,30" (which is 10% discount from the total amount of Dept. 1 + Dept. 3 items) is displayed and printed, and that amount is subtracted from the sale total. (4,50 - 0,30 = 4,20)

6.25 FOREIGN CURRENCY EXCHANGE RATE SETTING

In this program, the rate of each foreign currencies (corresponding to the **[CUR 1]** to **[CUR 5]** keys) will be set. By setting a rate on each Foreign Currency Key, reading the sale total and tendering in the foreign currency value will be possible for sale finalization.

CONDITION Any time outside a sale

OPERATION Mode Lock: SET

|Exchange Rate for Foreign Currency 1| → **[CUR 1]**
0,000001 to 9999,999999
(Use the **[.]** key if decimal portion is contained in the rate.)
⋮
|Exchange Rate for Foreign Currency 5| → **[CUR 5]**
As for how to calculate the Exchange Rate,see the description below.

Foreign Currency Exchange Rate Calculation

1. The rate must be calculated in the subsidiary currency unit values for both the domestic and the foreign currencies. (In case of calculating the rate from the domestic to a foreign currency with the same zero-suppress form, such as from U.S. $ to French Franc, it will be no problem even if it is calculated in the main currency of $ and Franc. However, in case of exchanging from a domestic currency such as $ or Franc to Japanese yen or Italian Lira, or vice versa, this rule must be obeyed; otherwise a wrong rate will result.)

2. Calculate the required foreign currency value equivalent to the domestic currency value "1". Then the obtained value is the Exchange Rate value to be entered in the setting operation stated above.

   For example, if the domestic currency is U.S.
   1¢ = xxxx.xxxxxx centimes (French Franc)
   = xxxx.xxxxxx pfennigs (Deutshe Mark)
   = xxxx.xxxxxx yen (Japanese yen)
   etc.

   Enter this value as each foreign currency rate.

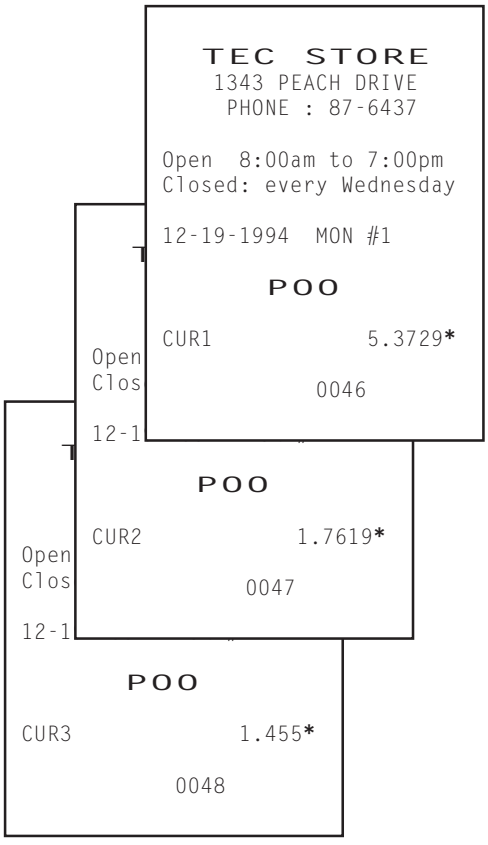
ex.) To set three foreign currency rates:
Domestic Currency ..... U.S. $
Assigning: **[CUR 1]** ..... French Franc
[CUR 2] ..... Deutsche Mark
[CUR 3] ..... Japanese yen

Conditions given for Domestic and Foreign Currencies
(The rates here are merely examples.)

(DOMESTIC)		(CUR1)		(CUR2)		(CUR3)	
U.S. Dollar		French Franc		Deutsche Mark		Japanese yen	
↓		↓		↓		↓	
$ 1.00	=	F 5.3729	=	DM 1.7619	=	(145.50)	..... in Main Currency Values
↓		↓		↓		↓	
1 cent	=	5.3729 centimes	=	1.7619 pfennigs	=	1.4550 yen	..... in Subsidiary Currency Values (Enter these values for setting.)

KEY OPERATION for setting the rates above:

Mode Lock: SET
5 **[.]** 3729 **[CUR 1]** (for French Franc)
1 **[.]** 7619 **[CUR 2]** (for Deutsche Mark)
1 **[.]** 4550 **[CUR 3]** (for Japanese yen)



Resetting a Foreign Currency Rate Once Set:

Enter “0” in place of the Exchange Rate for the Foreign Currency in the setting operation. Then the rate for that foreign currency will be reset. The Foreign Currency Key of the rate thus reset cannot be used in sales entries.

6.26 TAX TABLE PROGRAMMING

A maximum of four tax tables can be programmed (Tax 1, Tax 2, Tax 3, Tax 4) in accordance with installation of **[TX1/M]**, **[TX2/M]**, **[TX3/M]**, **[TX4/M]** keys.

CONDITION After Financial Daily Reset

OPERATION Mode Lock: SET

TYPE 1: TAX 1 FULL BREAKS (COMBINATION OF NON-CYCLIC AND CYCLIC BREAKS)

|Max.amount non-taxable| **[TX1/M]**
|Max.amount for 1¢ tax levied| **[TX1/M]**
|Max.amount for 2¢ tax levied| **[TX1/M]**
⋮
Repeat up to the "A" Break
⋮
|Max.amount for N¢ tax levied| **[TX1/M]** ... "A" Break (Non-cyclic Break Limit)
[ST] (to indicate the completion of Non-cyclic Breaks)
⋮
|Max.amount for N + 1¢ tax levied| **[TX1/M]** (beginning of Cyclic Breaks)
|Max.amount for N + 2¢ tax levied| **[TX1/M]**
⋮
Repeat up to the "B" Break ("B" Break - "A" Break = Multiple of $ 1.00; max. $9.00)

[AT/TL] (to complete this tax table programming)

NOTE: *The break amount entry must be a maximum of 4 digits (1 to 9999 resulting in $0.01 to $99.99)*

TYPE 2: TAX 1 COMBINATION OF NON-CYCLIC BREAKS AND % RATE

First set all the breaks up to the "A" Break entry and the **[ST]** key depression as shown in TYPE 1.

↓

|TAX RATE applied when exceeding the "A" Break amount|
(0.0001 to 99.9999 (%); use the **[.]** key if a decimal portion is contained. Examples: To set 5 %, enter 5. To set 5.26 %, enter 5.26. The fraction of the amount resulting from this % rate calculation will be rounded off.)

↓

[AT/TL] (to complete this tax table programming)

TYPE 3: TAX 1 % RATE ONLY

0 **[TX1/M]** → **[ST]** → |TAX RATE| **[AT/TL]**
⋮
(The description for the TAX RATE in TYPE 2 is also applied to this case.)

NOTES:
1. *For Tax 2, Tax 3, Tax 4 table programming, follow the same procedure in TYPE 1, 2, or 3 on the preceding page, using **[TX2/M]** or **[TX3/M]** or **[TX4/M]** instead of **[TX1/M]**.*
2. *If multiple tax tables are programmed, the Tax 1 table must be set first, then Tax 2, Tax 3 and Tax 4. The Tax 1 table setting will automatically reset all of the old Tax 1, 2, 3. and 4 tables if they have been programmed.*
3. *No second depression of the **[ST]** key is allowed within one tax table programming.*
4. *A maximum of 99 breaks can be entered for Tax 1 to Tax 4 tables altogether.*

ex. 1) TAX 1 FULL BREAKS

Tax Table		Key Operation	
Amount Range	Tax Levied	Mode Lock: SET	
$0.00 to $0.10	0 ¢	10	**[TX1/M]**
$0.11 to $0.22	1 ¢	22	**[TX1/M]**
$0.23 to $0.39	2 ¢	39	**[TX1/M]**
$0.40 to $0.56	3 ¢	56	**[TX1/M]**
$0.57 to $0.73	4 ¢	73	**[TX1/M]**
$0.74 to $0.90	5 ¢	90	**[TX1/M]**
$0.91 to $1.08	6 ¢	108	**[TX1/M]**
....."A" Break			**[ST]**
$1.09 to $1.24	7 ¢	124	**[TX1/M]**
$1.25 to $1.41	8 ¢	141	**[TX1/M]**
$1.42 to $1.58	9 ¢	158	**[TX1/M]**
$1.59 to $1.74	10 ¢	174	**[TX1/M]**
$1.75 to $1.92	11 ¢	192	**[TX1/M]**
$1.92 to $2.08	12 ¢	208	**[TX1/M]**
....."B" Break			**[AT/TL]**

```
        TEC STORE
     1343 PEACH DRIVE
      PHONE : 87-6437

Open  8:00am to 7:00pm
Closed: every Wednesday

12-19-1994  MON #3001

          POO

TAX1
00                $0.10
01                $0.22
02                $0.39
03                $0.56
04                $0.73
05                $0.90
06                $1.08
*
07                $1.24
08                $1.41
09                $1.58
10                $1.74
11                $1.92
12                $2.08
**

              0058
```

ex. 2) TAX 2 COMBINATION OF NON-CYCLIC BREAKS AND % RATE

Tax Table		Key Operation	
Amount Range	Tax Levied	Mode Lock: SET	
$0.00 to $0.09	0 ¢	9	**[TX2/M]**
$0.10 to $0.29	1 ¢	29	**[TX2/M]**
$0.30 to $0.59	2 ¢	59	**[TX2/M]**
$0.60 to $0.84	3 ¢	84	**[TX2/M]**
$0.85 to $1.12	4 ¢	112	**[TX2/M]**
....."A" Break			**[ST]**
5 % is applied to any amount exceeding the "A" Break.		5	**[AT/TL]**

```
        TEC STORE
     1343 PEACH DRIVE
      PHONE : 87-6437

Open  8:00am to 7:00pm
Closed: every Wednesday

12-19-1994  MON #3001

          POO

TAX2
00                $0.09
01                $0.29
02                $0.59
03                $0.84
04                $1.12
*
                  5%

              0064
```

ex. 3) TAX 3 % RATE ONLY

Tax Table	Key Operation
	Mode Lock: SET
10 % is applied to any sale amount.	0 **[TX3/M]** **[ST]** 10 **[AT/TL]**

```
        TEC STORE
     1343 PEACH DRIVE
      PHONE : 87-6437

Open  8:00am to 7:00pm
Closed: every Wednesday

12-19-1994  MON #3001

          POO

TAX3
00                $0.00
*
                  10%

              0065
```

6.27 GST RATE SETTING

This operation sets the rate of GST (Goods and Service Tax) in CANADA.

CONDITION After Financial Daily Reset

OPERATION Mode Lock: SET

|GST Rate| ⟶ **[GST/M]**

(0.01 to 99.99 (%))
(Use the **[.]** key if the decimal portion is contained.)

To reset the rate once set:
Mode Lock: SET
Enter 0, depress the **[GST/M]** key.

ex.) To set the GST rate to 12 %:

OPERATION: Mode Lock: SET

12 **[GST/M]**

```
        TEC STORE
     1343 PEACH DRIVE
      PHONE : 87-6437

Open  8:00am to 7:00pm
Closed: every Wednesday

12-19-1994  MON #1

          POO

GST               12%

              0069
```

6.28 STORE/REGISTER NO. SETTING

A maximum of 6 digits may be set as ID No. for the store and/or register. And once set, it will be printed on every receipt and every transaction on journal.

CONDITION Any time outside a sale

OPERATION Mode Lock: SET

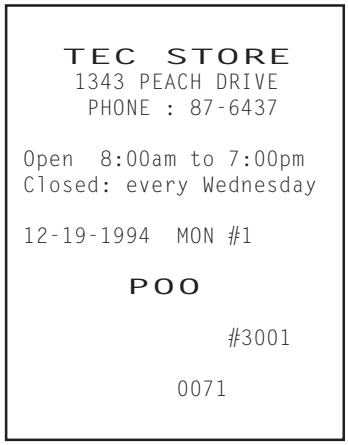
|Store/Register No.| ⟶ **[#]**

Max. 6 digits; 0 to 999999

ex.) To set the following:
Register No. of this terminal: 3001

OPERATION: Mode Lock: SET

3001 **[#]**



NOTE: *The preceding zeros, if entered, will not be printed. For example, if "001234" is entered in the above operation, "#1234" will always be printed as the Register No.*

7. VERIFICATION OF PROGRAMMED DATA

The programmed data entered in the preceding chapter can be read for verification purposes.
The print format of each program reading is almost the same as on the program receipt, except that “PX” and a 3-digit number are printed instead of printing “P” and a 2-digit number.

CONDITION Any time outside a sale

OPERATION Mode Lock: X or SET

1. To read out the data of programming operations with a Submode No., first enter “1,” then each Submode No., and finally depress the **[AT/TL]** key.

   For example, to read the programmed data entered in Submode 1 (STORE NAME/MESSAGE, COMMERCIAL MESSAGE, PROGRAMMING), operate:

   1 0 1 → **[AT/TL]**

   - Submode No. (In case of a 1-digit number, add a “0” on top to be a 2-digit number.
   - Always attach “1” to the Program Submode No. for reading data.

   NOTE: *Data of Submodes 5, 6 cannot be read.*

2. To read out the data of programming operations without a Submode No., the following operation will read all the data together:

   1 0 0 → **[AT/TL]**

   To read the data of the following operations:
   - %+ and %- PRESET RATE
   - SELECTIVE ITEMIZER RATE
   - FOREIGN CURRENCY EXCHANGE RATE
   - TAX TABLE (For tax calculation test, refer to the next page.)
   - GST RATE

3. Zone destination is possible in reading the PLU TABLE:

   1 0 4 → **[ST]** → Zone-start PLU Code **[@/FOR]** Zone-end PLU Code → **[AT/TL]**

   NOTE: *On depressing the **[AT/TL]** key, the programmed data will be printed. To abort printing once started, depress the **[ITEM CORR]** or **[VOID]** key. The reading operation is immediately stopped halfway.*

7.1 Tax Calculation Test

CONDITION — Any time outside a sale

OPERATION — Mode Lock: X or SET

Enter any amount. → Depress **[TXBL TL]**

Displays the entered amount.

Displays the tax amount (Tax 1 + Tax 2 + Tax 3 + Tax 4) is displayed, issuing a receipt such as below.

```
        TEC STORE
     1343 PEACH DRIVE
      PHONE : 87-6437

Open  8:00am to 7:00pm
Closed: every Wednesday

12-19-1994  MON #3001

            PX
                $100.00
TAX1              $6.00
TAX2              $5.00
TAX3              $4.00
TAX4              $3.00

              00762
```

Entered Amount
Tax 1 amount calculated
Tax 2 amount calculated
Tax 3 amount calculated
Tax 4 amount calculated

NOTE: *The print or non-print status of each calculated tax amount can be programmed.*

8. BAR CODE SYSTEM FOR EACH MODEL

Symbols of Bar Code Components (applicable to any of the following tables)

F .....Flag Code
M .....Merchandise Maker Code
I .....Merchandise Item Code
X .....Other type of Item Code or Price Value
P .....Price Value
C/D .....Check Digit (on the entire code)
C/DP.....Check Digit on Price

Bar Code Type Table

Read Code Type	Symbol	Marking Method	Version	Bar Code Components
1	UPC	Source	UPC-A Standard	F_1 F_2 M_1 M_2 M_3 M_4 M_5 I_1 I_2 I_3 I_4 I_5 C/D (F_1 = 0 fixed, F_2 = 0, 1, 3, 6 ~ 9)
2	UPC	Source	UPC-E Shortened	F_2 X_1 X_2 X_3 X_4 X_5 X_6 C/D (F_2 = 0 fixed, X_1 = 0 ~ 9, X_1 = 0: Not applicable to the Read Code Type 11) The method of converting the shortened type into the standard type is determined by a program option.
3	EAN JAN	Source	EAN-13 JAN-13 Standard	F_1 F_2 M_1 M_2 M_3 M_4 M_5 I_1 I_2 I_3 I_4 I_5 C/D (F_1 F_2 = 30 ~ 97)
4	EAN JAN	Source	EAN-8 JAN-8 Shortened	F_1 F_2 M_1 M_2 M_3 M_4 I_5 C/D (F_1 F_2 = 30 ~ 97)
5	UPC	Source	Coupon Standard	F_1 F_2 X_1 X_2 X_3 X_4 X_5 X_6 X_7 X_8 X_9 X_{10} C/D (F_1 = 0 fixed, F_2 = 5, X_9 X_{10} = Coupon Code.)
6	EAN JAN	Source	Coupon Standard	F_1 F_2 X_1 X_2 X_3 X_4 X_5 X_6 X_7 X_8 X_9 X_{10} C/D (F_1 F_2 = 98, 99) (X_8 X_9 X_{10} is the coupon amount.)
7	UPC	In-store	Non-PLU	Price 4 dig. C/DP. Item Code 5 dig.: F_1 2 X_1 X_2 X_3 X_4 X_5 C/DP P_1 P_2 P_3 P_4 C/D Price 5 dig. Item Code 5 dig.: F_1 2 X_1 X_2 X_3 X_4 X_5 P_1 P_2 P_3 P_4 P_5 C/D Price 4 dig. Item Code 6 dig.: F_1 2 X_1 X_2 X_3 X_4 X_5 X_6 P_1 P_2 P_3 P_4 C/D (F_1 F_2 = 02 fixed) *The processing type (selection of Bar Code Components) is programmable.*
8	JAN UPC	In-store	Non-PLU	Non-PLU Price 4 dig. C/DP. Item Code 5 dig.: F_1 F_2 X_1 X_2 X_3 X_4 X_5 C/DP P_1 P_2 P_3 P_4 C/D Non-PLU Price 5 dig. Item Code 5 dig. F_1 F_2 X_1 X_2 X_3 X_4 X_5 P_1 P_2 P_3 P_4 P_5 C/D Non-PLU Price 4 dig. Item Code 6 dig. F_1 F_2 X_1 X_2 X_3 X_4 X_5 X_6 P_1 P_2 P_3 P_4 C/D
			PLU	F_1 F_2 X_1 X_2 X_3 X_4 X_5 X_6 X_7 X_8 X_9 X_{10} C/D
				(F_1 F_2 = 04, 10 ~ 29) *The processing type (selection of Bar Code Components) is programmable.*
9, 10				*-- reserved --*
11	UPC	In-store	LAC	F_2 X_1 X_2 X_3 X_4 X_5 X_6 C/D (F_2 X_1 = 00 fixed; X_2 X_3 X_4 X_5 = 1000 ~ 7999; X_6 = 5 ~ 9)

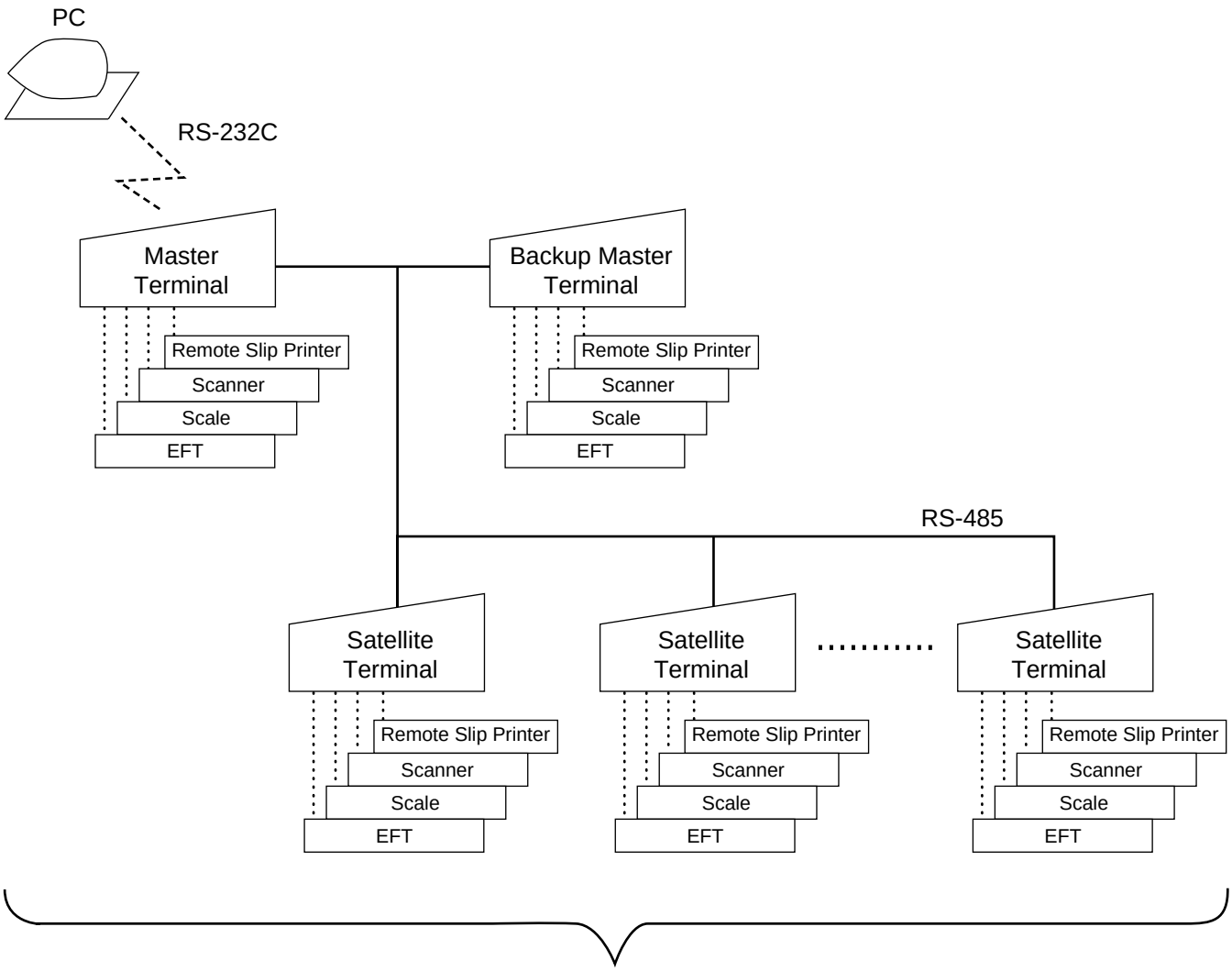
3. M/S LEVEL OPERATOR'S GUIDE

TABLE OF CONTENTS

1. INTRODUCTION

Making the most of the functions of the previously described MA-1650 standalone, the MA-1650 can be developed into a master-satellite system.
By adding the IFU Board for Master-Satellite, a Batch-consolidation or Scanning system of a maximum of 16 terminals can be built. By connecting a PC (which requires another IFU board separately sold), the system can also be expanded into a transaction data capture system.
Operational functions on each terminal ECR basically stay the same as on a standalone ECR, except those deleted, changed, or added for this M/S system use which are described later.

2. SYSTEM CONFIGURATION



Batch-consolidation/Scanning System: Max. 6 terminals

Master Terminal	... 1 unit
Backup Master Terminal	... 1 unit
Satellite Terminal	... Max. 14 units

or

Master Terminal	... 1 unit
Satellite Terminal	... Max. 14 units

Remote Slip Printer:	DRS-207
Scanner:	OCIA Interface Type
Scale:	Parallel Scale

3. HARDWARE DESCRIPTION

3.1. COMMUNICATION SEQUENCE

RS-485 Line

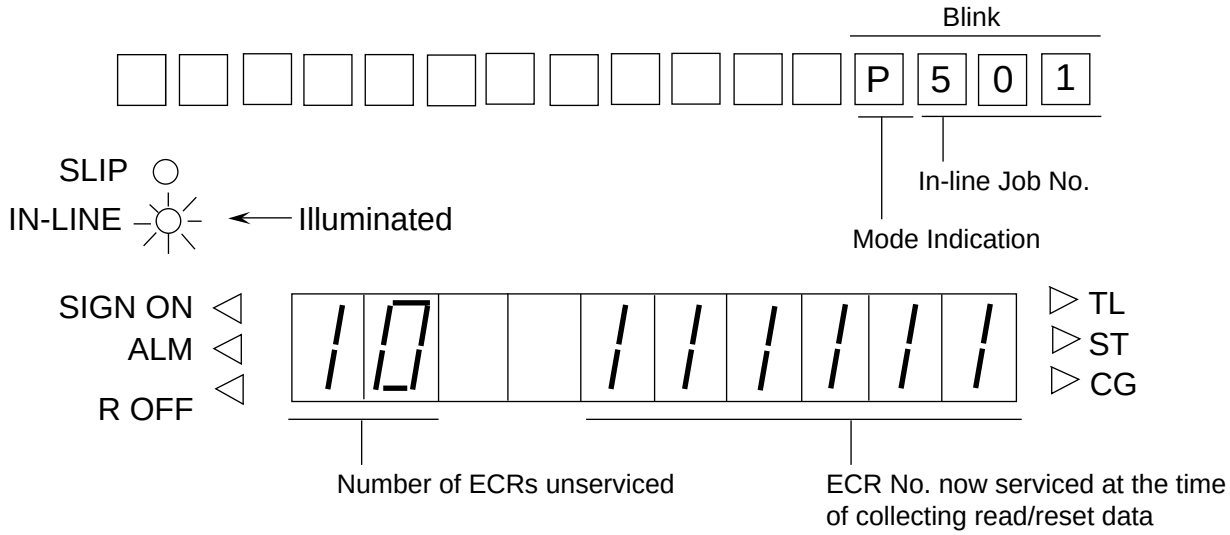
3.2. HARDWARE COMPOSITION

A Master-Satellite System is realized by adding the IFU boards to each standalone ECR.

3.3. OPERATOR DISPLAY INDICATIONS OF MASTER-SATELLITE SYSTEM

■ Display Indications during In-line Services
The followings are displayed in the 16-digit dot windows, 10-digit 7-segment window, and IN-LINE Lamp of the Operator Display panel during in-line services.

<Master Terminal>



- IN-LINE Lamp
  1) Illuminated during RTR declaration “ON”
  2) Extinguished during RTR declaration “OFF”
  3) Blinking during ULL operations

- Mode Indication

.....	5	4	3	2	1
RTR/SET **Mode**:		P			
RTR/X **Mode**:		X			
RTR/Z **Mode**:		Z			

<Satellite Terminals or Backup Master Terminal>

- IN-LINE Lamp
  1) Illuminated during “Hold” condition
  2) Extinguished after completing in-line services
  3) Blinking during in-line services

■ Error Messages
The following table shows the Error Codes and Messages to be displayed on in-line terminals, in addition to those displayed on Standalone ECRs.

IN-LINE ERROR CODE AND MESSAGE TABLE
(to be added to the table for the Standalone Level)

Error Message (Standard Setting)	Cause of Error
OCCUPY	A designated file is already occupied by other terminal.
IRC CONNECT ERR	Transmission cannot be executed due to the connection error (Disconnection of the line, or Master Terminal’s power is OFF, etc.)
MASTER IS BUSY	An inquiry file is being used.
PLEASE BACK UP	RTR Declaration cannot be canceled due to the Backup Error
TRANS BUFF FULL	Satellite Transaction Buffer is full.

4. ADDITIONAL FUNCTION KEY AND REGISTERING PROCEDURE

The following is the key that can be installed on the Master Terminal of an in-line system, in addition to the standalone specifications, and the registering procedure using the key.

RTR

RTR (Register-to-Register) DECLARATION Key ([RTR])

■ By depressing the **[RTR]** key on the Master Terminal, various in-line jobs (DLLs, Consolidated Read/Reset Report takings, etc.) can be performed.

PROCEDURE ON A MASTER TERMINAL FOR RTR DECLARATION

Mode Lock: SET, X, Z, or MGR/Anytime outside a sale

Depress **[RTR]**

NOTES:
1. *While a PC job is under way (a command of ULL, DLL, or Read/Reset from the PC), this RTR Declaration is not possible. Similarly, while this RTR Declaration is on, no PC jobs are possible.*
2. *While the RTR Declaration is on, no transaction entries in REG, MGR, or ⊡ mode are possible.*
3. *While the RTR Declaration is on, no Backup Data Check is performed.*
4. *While the RTR Declaration is on, the following are jobs to be allowed:*
   - *Programming Operations*
   - *DLL Operations (DLL to Satellite Terminals)*
   - *Consolidated Read/Reset Report takings*
   - *Manual Copying of Backup Data*
5. *The **[RTR]** key can be programmed to require Manager Intervention.*
6. *If the option "Auto Data Copying feature" is selected for Copying of Backup Data, the RTR Declaration is not possible while a backup data update process is under way.*
7. *If the option "Compulsion of Data Sending to PC" is selected, the RTR Declaration is not possible until sending the reset data (the consolidation data) to PC is completed.*

■ By depressing the **[RTR]** key on the Master Terminal when the RTR Declaration is on, the RTR Declaration ON status is canceled.

PROCEDURE ON A MASTER TERMINAL FOR RTR DECLARATION CANCEL

Mode Lock: SET, X, Z, or MGR/RTR Declaration is ON

Depress **[RTR]**

NOTE: *If the Backup Error Flag is ON (the standard error message is "PLEASE BACK UP"), it means that manual copying of Backup Data is required, and therefore the RTR Declaration Cancel is not accepted until copying is completed.*

4. M/S LEVEL MANAGER'S GUIDE

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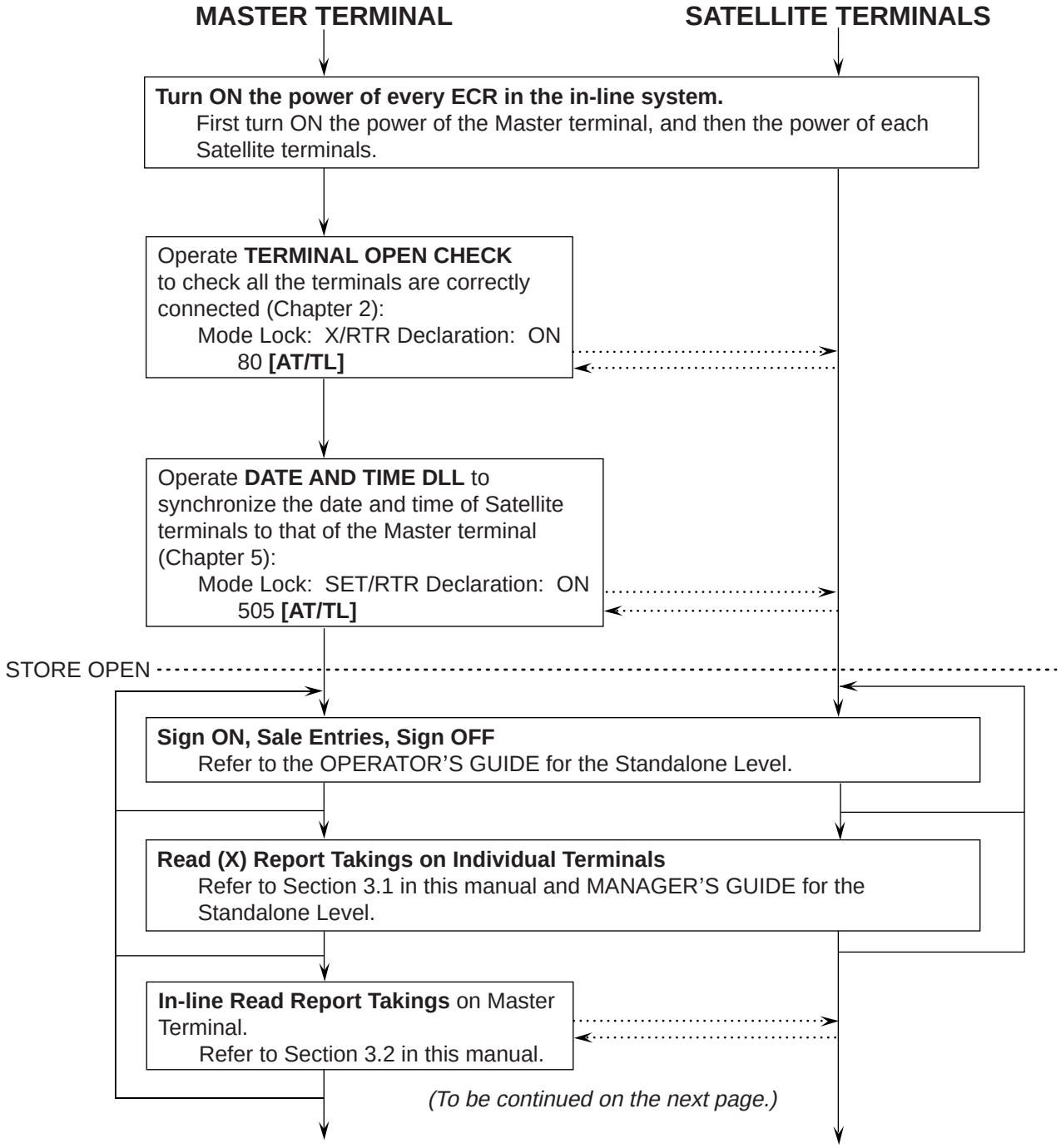
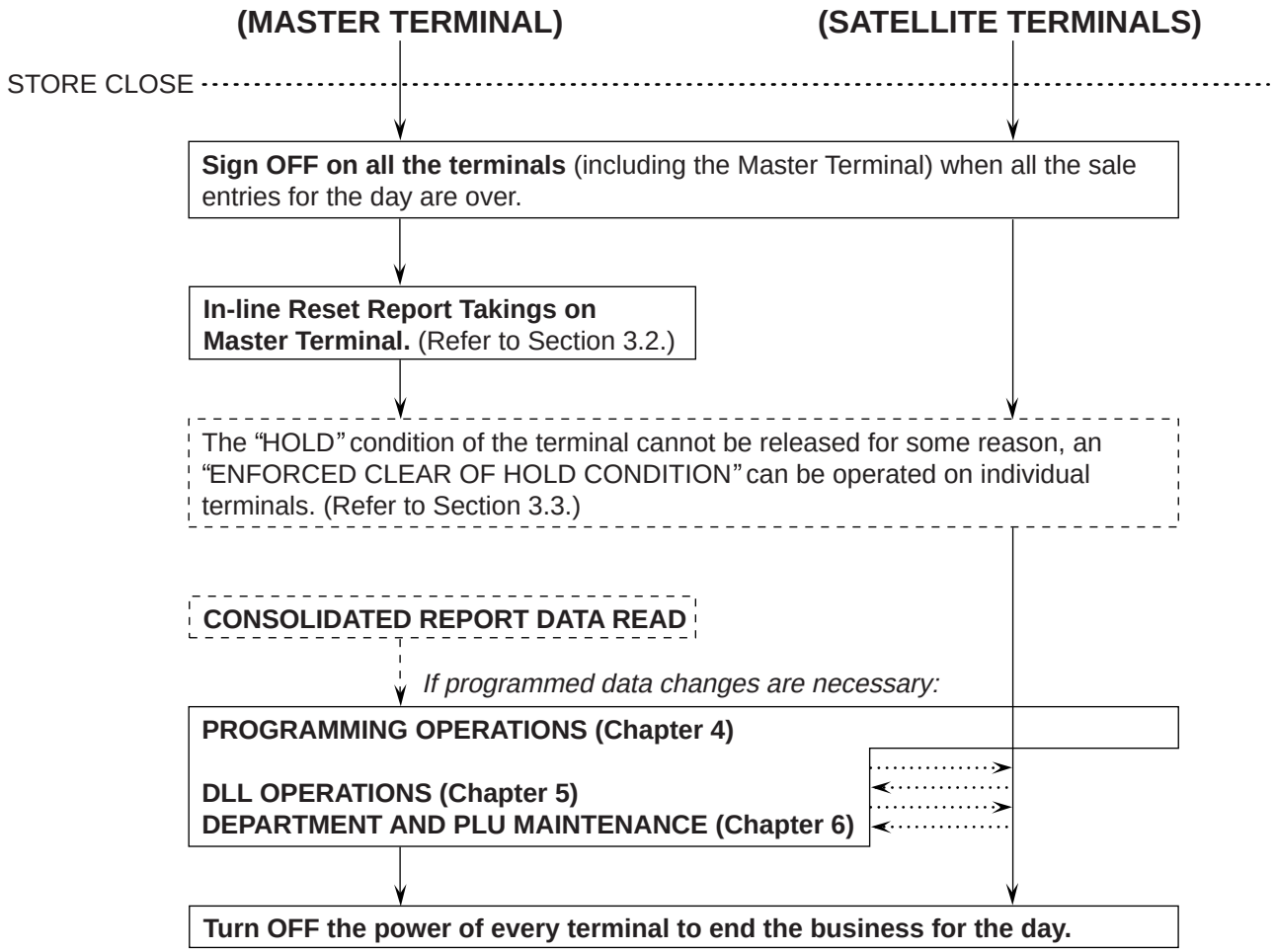
1. DAILY OPERATION FLOW

In a Master-Satellite System, a certain order of jobs on the Master and Satellite terminals are provided. If the necessary jobs are not proceeded in the correct order, sale entries may not be operated or report collections may not be possible. The following chart shows the basic daily operation flow on the Master and Satellite terminals.



(Continued from the preceding page.)



2. OPERATIONS BEFORE IN-LINE SERVICE

Before entering in-line service operations (In-line Report takings, DLLs, etc.), the following operations are available if necessary.

2.1 TERMINAL OPEN CHECK

This operation sends a dummy text to those terminals set in the TERMINAL CONNECTION TABLE (Submode 69), and prints out the Register Nos. of the disconnected terminals (i.e. terminals not responding).

CONDITION Any time outside a sale (operable on Master Terminal)

OPERATION Mode Lock: X and IN-LINE Lamp illuminated

80 **[AT/TL]**

Master Terminal Receipt Print

When the check result is normal:
Prints the Report Name only.

```
      TEC STORE
    1343 PEACH DRIVE
     PHONE : 87-6437

Open  8:00am to 7:00pm
Closed: every Wednesday

19-12-1994  MON #1

**********************
NOT CONNECT
**********************
            0035 14:43TM
```

When any error status is found:
Prints the Register Nos. of the terminals not connected properly, as well as the Report Name.

```
      TEC STORE
    1343 PEACH DRIVE
     PHONE : 87-6437

Open  8:00am to 7:00pm
Closed: every Wednesday

19-12-1994  MON #1

**********************
NOT CONNECT
   #3003
**********************
            0024 14:36TM
```

2.2 TERMINAL DESIGNATION

This operation can be performed before any in-line service operation. When this operation is skipped, no specific terminals are designated, i.e., the in-line service operations will be performed to all the terminals.

CONDITION — Any time outside a sale

OPERATION — Mode Lock: SET, X, or Z (depending on the in-line service operations to follow)
RTR Declaration ON Status (i.e., the IN-LINE Lamp should be illuminated)
To be operated on the Master Terminal only.

[#] → |Register No.| **[#]** → **[AT/TL]**

Enter the Register No. of the Terminal subject to the in-line service operations to follow.

Repeat for other terminals if more are subject to the in-line service operation.

NOTE: *The Terminal Designation once declared by the above operation will be canceled by changing the position of the Mode Lock, or by RTR Declaration Cancel, or by turning OFF and ON the power of the terminal. The designation is automatically canceled on completion of the operation to follow or when a new designation is operated.*

ex.) To designate the following Terminal out of two terminals in the system:

Terminal ID No.3: Register No. 3003

Mode Lock: SET (if operated before DLLs)
The RTR Declaration must be ON (i.e., the IN-LINE Lamp must be illuminated; if not, depress the **[RTR]** key to declare RTR status).

[#] 3003 **[#]** **[AT/TL]**

(Issues a receipt, printing the Register Nos. of the terminals designated in the above operation.)

```
      TEC STORE
    1343 PEACH DRIVE
     PHONE : 87-6437

Open  8:00am to 7:00pm
Closed: every Wednesday

19-12-1994  MON #1

        POO
03              #3003

              0023 14:33TM
```

2.3 TERMINAL CONDITION CHECK

This operation checks the condition of the designated terminals, and prints out the status responded from the terminals.

CONDITION — Any time outside a sale (operable on Master Terminal)

OPERATION — Mode Lock: X and IN-LINE Lamp illuminated

81 **[AT/TL]**

Master Terminal Receipt Print

```
      TEC  STORE
    1343 PEACH DRIVE
     PHONE : 87-6437

Open  8:00am to 7:00pm
Closed: every Wednesday

19-12-1994  MON #1

**********************
T/M  CHECK
  #111101 OK
**********************
            0036 14:44TM
```

Status Symbol
- OK: The terminal condition is normal.
- ?: No response (power-OFF, etc.)
- BUSY: The terminal is busy (during a sale, etc.).
- Blank: Other statuses

3. RESERVATION

3.1. RESERVATION FUNCTION

This function is applied only to a system with the CVS spec. selected.
Performing the following reservations on the Master Terminal forces the Satellite Terminals to copy the relevant report data into the communication buffers. Therefore, the Master Terminal can consolidate report data of the Satellite Terminals, and issue an in-line report even while the Satellite Terminals sign off, and perform sales entries.

TABLE OF RESERVATION OPERATIONS

RTR Declaration: ON

Report Name		Mode Lock	Key Operation
COMBINATION REPORTS			
• Combination 1 Read:	Daily	X	600 **[AT/TL]**
	GT	X	700 **[AT/TL]**
• Combination 2 Read:	Daily	X	601 **[AT/TL]**
	GT	X	701 **[AT/TL]**
• Combination 3 Read:	Daily	X	602 **[AT/TL]**
	GT	X	702 **[AT/TL]**
• Combination 1 Reset:	Daily	Z	600 **[AT/TL]**
	GT	Z	700 **[AT/TL]**
• Combination 2 Reset:	Daily	Z	601 **[AT/TL]**
	GT	Z	701 **[AT/TL]**
• Combination 3 Reset:	Daily	Z	602 **[AT/TL]**
	GT	Z	702 **[AT/TL]**
FINANCIAL REPORTS			
• Financial Read:	Daily	X	603 **[AT/TL]**
	GT	X	703 **[AT/TL]**
• Financial Reset:	Daily	Z	603 **[AT/TL]**
	GT	Z	703 **[AT/TL]**
CASHIER REPORTS (for the Floating Cashier feature)			
• Individual Cashier Read:	Daily	X	604 **[#]** |Cashier ID Code| **[AT/TL]** (2 digit manager-assign code)
	GT	X	Start with 704 instead of 604 in the above pattern.
• Individual Cashier Read:	Daily	Z	604 **[#]** |Cashier ID Code| **[AT/TL]** (2 digit manager-assign code)
	GT	Z	Start with 704 instead of 604 in the above pattern.
• All store All Cashier Read:	Daily	X	604 **[AT/TL]**
	GT	X	704 **[AT/TL]**
• All store All Cashier Reset:	Daily	Z	604 **[AT/TL]**
	GT	Z	704 **[AT/TL]**

(to be continued on next page)

TABLE OF RESERVATION OPERATIONS *(continued)*

RTR Declaration: ON

Report Name		Mode Lock	Key Operation
SALESPERSON REPORTS (Daily only)			
• All-store All Salesperson Read		X	605 **[AT/TL]**
• All-store All Salesperson Reset		Z	605 **[AT/TL]**
CREDIT CARD COMPANY SALES REPORTS			
• Credit Card Company	Daily	X	606 **[AT/TL]**
Sales Read:	GT	X	706 **[AT/TL]**
• Credit Card Company	Daily	Z	606 **[AT/TL]**
Sales Reset:	GT	Z	706 **[AT/TL]**
DEPARTMENT GROUP REPORTS (Read only)			
• Department Group Read:	Daily	X	608 **[AT/TL]**
	GT	X	708 **[AT/TL]**
MEDIA SALES AND IN-DRAWER READ (Daily only)		X	609 **[AT/TL]**
HOURLY RANGE REPORTS			
• Hourly Read (Daily only)		X	610 **[AT/TL]**
• Hourly Reset (Daily only)		Z	610 **[AT/TL]**
DEPARTMENT REPORTS			
• All Department Read:	Daily	X	611 **[AT/TL]**
	GT	X	711 **[AT/TL]**
• All Department Reset:	Daily	Z	611 **[AT/TL]**
	GT	Z	711 **[AT/TL]**
ALL MEDIA SALES TOTAL AND CASH-IN-DRAWER READ (Daily only)		X	612 **[AT/TL]**
PLU REPORTS (For the feature "PLU to be inquired to the Center File.") (Daily only)			
• All PLU Read		X	613 **[AT/TL]**
• All PLU Reset		Z	613 **[AT/TL]**
• Zone PLU Read		X	613 **[#]** → |Zone-start PLU Code| **[@/FOR]** → |Zone-end PLU Code| **[AT/TL]**
• Zone PLU Reset		Z	613 **[#]** → |Zone-start PLU Code| **[@/FOR]** → |Zone-end PLU Code| **[AT/TL]**
PLU GROUP REPORTS			
• PLU Group Read:	Daily	X	624 **[AT/TL]**
	GT	X	724 **[AT/TL]**
• PLU Group Reset:	Daily	Z	624 **[AT/TL]**
	GT	Z	724 **[AT/TL]**

(to be continued on next page)

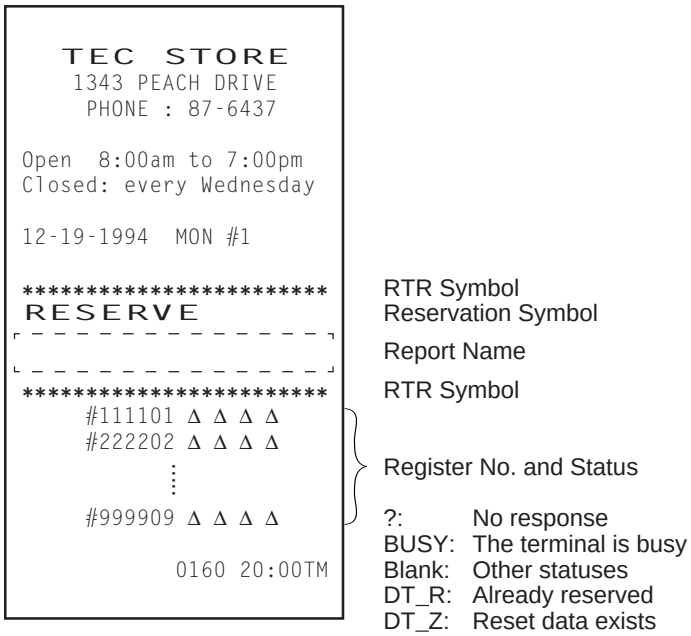
TABLE OF RESERVATION OPERATIONS *(continued)*

RTR Declaration: ON

Report Name	Mode Lock	Key Operation
CUSTOMER FILE REPORTS (for Check Track Memory type only)		
• All Files Read	X	615 **[AT/TL]**
• All Files Reset (Version 1.7 or after)	Z	615 **[AT/TL]**
• Zone Files Read	X	615 **[#]** → |Zone-start File Code| **[@/FOR]** → |Zone-end File Code| **[AT/TL]**
• Zone Files Reset (Version 1.7 or after)	Z	615 **[#]** → |Zone-start File Code| **[@/FOR]** → |Zone-end File Code| **[AT/TL]**

NOTES:
1. *Reservation function is unavailable when the Satellite Terminals perform the transactions in SET, X and Z modes.*
2. *Reservation function is only an operation to copy report data into the communication buffer. Therefore, actual report cannot be issued by this function. To issue a report, key operation to issue it is further necessary on the Master Terminal. Refer to the next chapter "4. READ AND RESET REPORTS" regarding key operation to issue a report.*
3. *When Resevation operation is performed before the data is set in the communication buffer, "DT R" will be printed.*
   When the reservation reset is performed under the condition that the reset data is in the communication buffer, "DT_Z" will be printed.

3.2. REPORT RESERVATION PRINT FORMAT



RTR Symbol
Reservation Symbol

Report Name

RTR Symbol

Register No. and Status

?: No response
BUSY: The terminal is busy
Blank: Other statuses
DT_R: Already reserved
DT_Z: Reset data exists

3.3. OPERATIONS RELATIVE TO RESERVATION

The following operations are available only to a system with the CVS spec. selected.

READ OF INFORMATION ALREADY COPIED IN COMMUNICATION BUFFER

This operation issues report names of which sales data have been already copied in the communication buffer.

OPERATION ON ANY TERMINAL: MODE LOCK: X
96 **[AT/TL]**

NOTE: *The following contents are printed.*
- *Distinction of report (Read or Reset)*
- *Transaction name*

ENFORCED CLEAR OF COMMUNICATION BUFFER

This operation forcibly clears the content already copied in the communication buffer.

OPERATION ON ANY TERMINAL: MODE LOCK: Z
9998 **[AT/TL]**

NOTE: *This operation should be performed only when malfunction of PC or Master Terminal occurs. Therefore, the memory content is not guaranteed if this operation is performed when a system is normal.*

4. READ AND RESET REPORTS

4.1 TERMINAL REPORTS

Since most reports are taken as in-line reports on the Master Terminal, some of the reports which are available on the individual standalone ECR basis cannot be taken on Master or Satellite ECRs of the in-line system. The following are the reports which are listed in the MANAGER'S GUIDE for the standalone level but cannot be taken on any ECRs of the in-line system. Other reports not listed below can be taken even in the in-line system. (Before taking those reports, however, please read the next section 4.2.: IN-LINE REPORTS.)

TERMINAL REPORTS that cannot be taken on any ECRs of the in-line system

DAILY REPORTS

REPORT NAME
CASHIER READ AND RESET REPORTS (when adopting the Floating Cashier Feature) • Individual Cashier Read • Individual Cashier Reset • All Cashier Read • All Cashier Reset
PLU READ AND RESET REPORTS (when programming PLU data in the Center File) • Individual PLU Read • Zone PLU Read • Zone PLU Reset • All PLU Read • All PLU Reset • Inactive PLU Read
CUSTOMER FILE READ REPORTS (for Check Track Memory type only) • Individual File Read • Zone Files Read • All Files Read • Zero-balance Files Read • Debit-balance Files Read • Credit-balance Files Read

GT REPORTS

REPORT NAME
CASHIER GT READ AND RESET REPORTS (when adopting the Floating Cashier Feature) • Individual Cashier GT Read • Individual Cashier GT Reset • All Cashier GT Read • All Cashier GT Reset
PLU GT READ AND RESET REPORTS (when programming PLU data in the Center File) • Individual PLU GT Read • Zone PLU GT Read • Zone PLU GT Reset • All PLU GT Read • All PLU GT Reset • Inactive PLU GT Read

4.2 IN-LINE REPORTS

4.2.1 IN-LINE REPORT COMMAND EXECUTIONS

Before taking in-line reports, please note the following:

1) In-line Reset Reports (as well as In-line Read Reports) can be taken on the Master Terminal as long as the Satellite Terminals are in the idle state ("Signed OFF" condition in case of the cashier code entry type). To check status of all the terminals connected to the in-line loop, TERMINAL CONDITION CHECK can be operated (refer to Chapter 2).

2) When In-line Reports are taken, the power of each Satellite terminal must be turned ON but the Mode Lock can be in any positions.

The operation flow for taking In-line Reports is shown on the next page, and the table of In-line Reports is on the following pages.

The key operation for each In-line Report is the same as the corresponding terminal report available on the standalone ECR. However, the key operation can be executed only on the Master Terminal while the **[RTR]** key is turned on.

Conditions required on terminals for In-line Report takings:

Read/Reset Reports (Daily or GT)

Master Terminal: Any time outside a sale
Satellite Terminals: (NOTE below)

Lock Positions Required:

Master Terminal: Mode Lock: X/RTR Declaration: ON
Mode Lock: Z/RTR Declaration: ON
Satellite Terminals: Any positions

NOTE: *Conditions required on the Satellite Terminals for in-line report takings depend on the system features.*

- *Cashier code entry type with the CVS spec. selected ... Satellite Terminal during sign OFF, sign ON, and sales entries*
- *Cashier code entry type without the CVS spec. ... Satellite Terminal during sign OFF, and sign ON with no sales entries performed*
- *Cashier key type with the CVS spec. selected ... Satellite Terminal during idling, and sales entries*
- *Cashier key type without CVS spec. ... Satellite Terminal during idling*
- *When the CVS spec. is selected and there is no collected data, "NO-D" will be printed. When the collected data is not agreed, "NO-A" will be printed.*

WARNING!
When opening the cash drawer, be careful not to let the drawer hit any person.

OPERATION FLOW OF IN-LINE READ OR RESET REPORTS

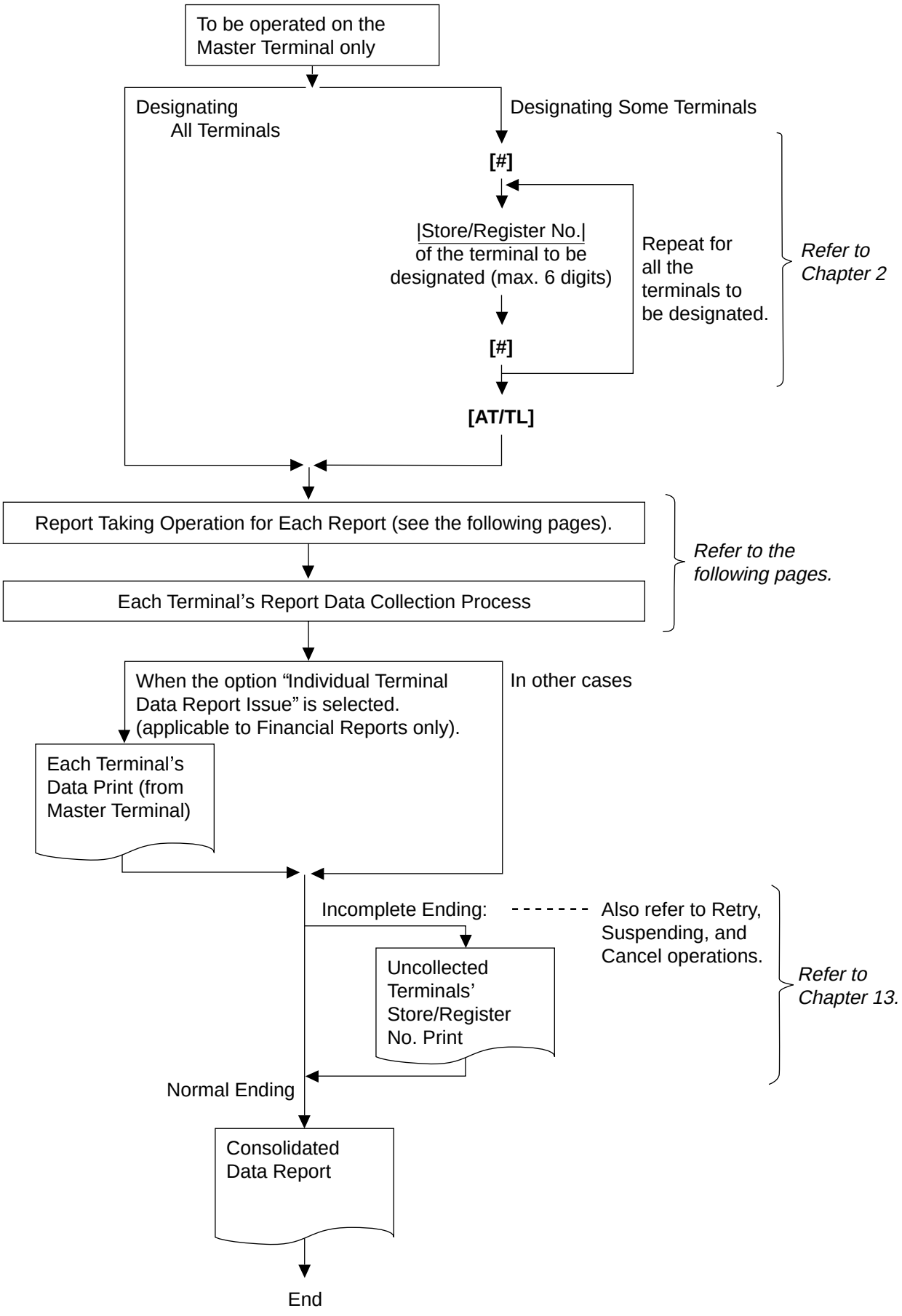


TABLE OF IN-LINE REPORT OPERATIONS
RTR Declaration: ON

Report Name		Mode Lock	Key Operation
COMBINATION REPORTS			
• Combination 1 Read:	Daily	X	**[AT/TL]**
	GT	X	200 **[AT/TL]**
• Combination 2 Read:	Daily	X	1 **[AT/TL]**
	GT	X	201 **[AT/TL]**
• Combination 3 Read:	Daily	X	2 **[AT/TL]**
	GT	X	202 **[AT/TL]**
• Combination 1 Reset:	Daily	Z	**[AT/TL]**
	GT	Z	200 **[AT/TL]**
• Combination 2 Reset:	Daily	Z	1 **[AT/TL]**
	GT	Z	201 **[AT/TL]**
• Combination 3 Reset:	Daily	Z	2 **[AT/TL]**
	GT	Z	202 **[AT/TL]**
FINANCIAL REPORTS			
• Financial Read:	Daily	X	3 **[AT/TL]**
	GT	X	203 **[AT/TL]**
• Financial Reset:	Daily	Z	3 **[AT/TL]**
	GT	Z	203 **[AT/TL]**
CASHIER REPORTS (for the Floating Cashier feature)			
• Individual Cashier Read:	Daily	X	4 **[#]** **|**Cashier ID Code**|** **[AT/TL]** (2-digit manager-assign code)
	GT	X	Start with 204 instead of 4 in the above pattern.
• Individual Cashier Reset:	Daily	Z	4 **[#]** |Cashier ID Code**|** **[AT/TL]** (2-digit manager-assign code)
	GT	Z	Start with 204 instead of 4 in the above pattern.
• All store All Cashier Read:	Daily	X	4 **[AT/TL]**
	GT	X	204 **[AT/TL]**
• All store All Cashier Reset:	Daily	Z	4 **[AT/TL]**
	GT	Z	204 **[AT/TL]**
CASHIER REPORTS (for the Non-Floating Cashier feature only)			
• Indiv. Terminal All Cashier Read:	Daily	X	4 **[AT/TL]**
	GT	X	204 **[AT/TL]**
• Indiv. Terminal All Cashier Reset:	Daily	Z	4 **[AT/TL]**
	GT	Z	204 **[AT/TL]**
SALESPERSON REPORTS (Daily only)			
• All-store All Salesperson Read		X	5 **[AT/TL]**
• All-store All Salesperson Reset		Z	5 **[AT/TL]**
CREDIT CARD COMPANY SALES REPORTS			
• Credit Card Company Sales Read:	Daily	X	6 **[AT/TL]**
	GT	X	206 **[AT/TL]**
• Credit Card Company Sales Reset :	Daily	Z	6 **[AT/TL]**
	GT	Z	206 **[AT/TL]**
DEPARTMENT GROUP REPORTS (Read only)			
• Department Group Read:	Daily	X	8 **[AT/TL]**
	GT	X	208 **[AT/TL]**

(to be continued on next page)

TABLE OF IN-LINE REPORT OPERATIONS *(continued)*
RTR Declaration: ON

Report Name		Mode Lock	Key Operation
MEDIA SALES AND IN-DRAWER READ (Daily only)		X	9 **[AT/TL]**
HOURLY RANGE REPORTS			
• Hourly Read (Daily only)		X	10 **[AT/TL]**
• Hourly Reset (Daily only)		Z	10 **[AT/TL]**
DEPARTMENT REPORTS			
• All Department Read:	Daily	X	11 **[AT/TL]**
	GT	X	211 **[AT/TL]**
• All Department Reset:	Daily	Z	11 **[AT/TL]**
	GT	Z	211 **[AT/TL]**
• Indiv. Department Read:	Daily	X	*(Process Reports; NOTE on the next page)* 11 **[#]** → **[DEPT]** (or |Code| **[DP#]**) → (**[ST]**) Repeat for required departments. **[AT/TL]** (to end)
	GT	X	Start with 211 instead of 11 in the above pattern.
ALL MEDIA SALES TOTAL AND CASH-IN-DRAWER READ (Daily only)		X	12 **[AT/TL]**
PLU REPORTS (Reports marked with "*" are unavailable for the system with the feature "PLU to be inquired to the Center File.")			
• All PLU Read:	Daily	X	13 **[AT/TL]**
	GT*	X	213 **[AT/TL]**
• All PLU Reset:	Daily	Z	13 **[AT/TL]**
	GT*	Z	213 **[AT/TL]**
• Zone PLU Read:	Daily	X	13 **[#]** → |Zone-start PLU Code| **[@/FOR]** → |Zone-end PLU Code| **[AT/TL]**
	GT*	X	Start with 213 instead of 13 in the above pattern.
• Zone PLU Reset:	Daily	Z	13 **[#]** → |Zone-start PLU Code| **[@/FOR]** → |Zone-end PLU Code| **[AT/TL]**
	GT*	Z	Start with 213 instead of 13 in the above pattern.
• Individual PLU Read:	Daily	X	*(Process Reports; NOTE on the next page)* 13 **[#]** → |PLU Code| **[PLU]** → (**[ST]**) **[AT/TL]** Repeat for required PLUs.
	GT*	X	Start with 213 instead of 13 in the above pattern.
• Inactive PLU Read:			*(Process Reports; NOTE on the next page)*
	Daily	X	13 **[#]** → 0 **[AT/TL]**
	GT*	X	Start with 213 instead of 13 in the above pattern.
PLU GROUP REPORTS			
• PLU Group Read:	Daily	X	24 **[AT/TL]**
	GT	X	224 **[AT/TL]**
• PLU Group Reset:	Daily	Z	24 **[AT/TL]**
	GT	Z	224 **[AT/TL]**

(to be continued on next page)

TABLE OF IN-LINE REPORT OPERATIONS *(continued)*
RTR Declaration: ON

Report Name	Mode Lock	Key Operation
CUSTOMER FILE READ (for Check Track Memory type only)		
• All Files Read	X	15 **[AT/TL]**
• All Files Reset	Z	
• Zone Files Read	X	15 **[#]** → |Zone-start File Code|
• Zone Files Reset	Z	**[@/FOR]** |Zone-end File Code| **[AT/TL]**
• Individual File Read	X	15 **[#]** → |File Code| **[@/FOR]** → **[AT/TL]**
• Zero-balance Files Read	X	15 **[#]** → 0 **[AT/TL]**
• Credit-balance Files Read	X	15 **[#]** → 1 **[AT/TL]**
• Debit-balance Files Read	X	15 **[#]** → 2 **[AT/TL]**

NOTE: *When the "Process Report" is marked, the report can only be taken after taking another report which consolidates the corresponding data to be based on. For further details, see the table and descriptions below.*

PROCESS REPORTS AND BASE REPORT DATA

The following table shows which process reports are available after which report data collections.

Reports Collection Required before Process Report takings *(CONSOLIDATION MEMORY CAPTURE: NOTE 1)*	Process Reports available
All Department Read Daily or All Department Reset Daily	Individual Department Read Daily
All Department Read GT or All Department Reset GT	Individual Department Read GT
Any of the following PLU reports (NOTE2) All PLU Read Daily Zone PLU Read Daily All PLU Reset Daily Zone PLU Reset Daily	Individual PLU Read Daily Inactive PLU Read Daily
Any of the following PLU reports (NOTE2) All PLU Read GT Zone PLU Read GT All PLU Reset GT Zone PLU Reset GT	Individual PLU Read GT Inactive PLU Read GT

NOTES: *1) CONSOLIDATION MEMORY CAPTURE: When an in-line read or reset report is taken on the Master Terminal, the consolidated data is automatically stored in the Consolidation Memory of the Master Terminal. The consolidated data stored there is not only used as the data for a Process Report but also sent to the PC by a command from the PC when a PC is connected.*

2) The process reports will be outputted based on the report data previously collected. For example, when an "Inactive PLU Read" report is taken after a "Zone PLU Read", only the inactive PLUs in the designated zone will be printed on the Inactive Read Report. (Only when the PLU is in a local file, a process report is printed. In this case, collection of data is required beforehand.)

*3) When individual department reading (daily/GT) is performed, press the **[OPEN]** key before performing all department reading (daily/GT). Then, only the consolidated data is created to output the process report.*

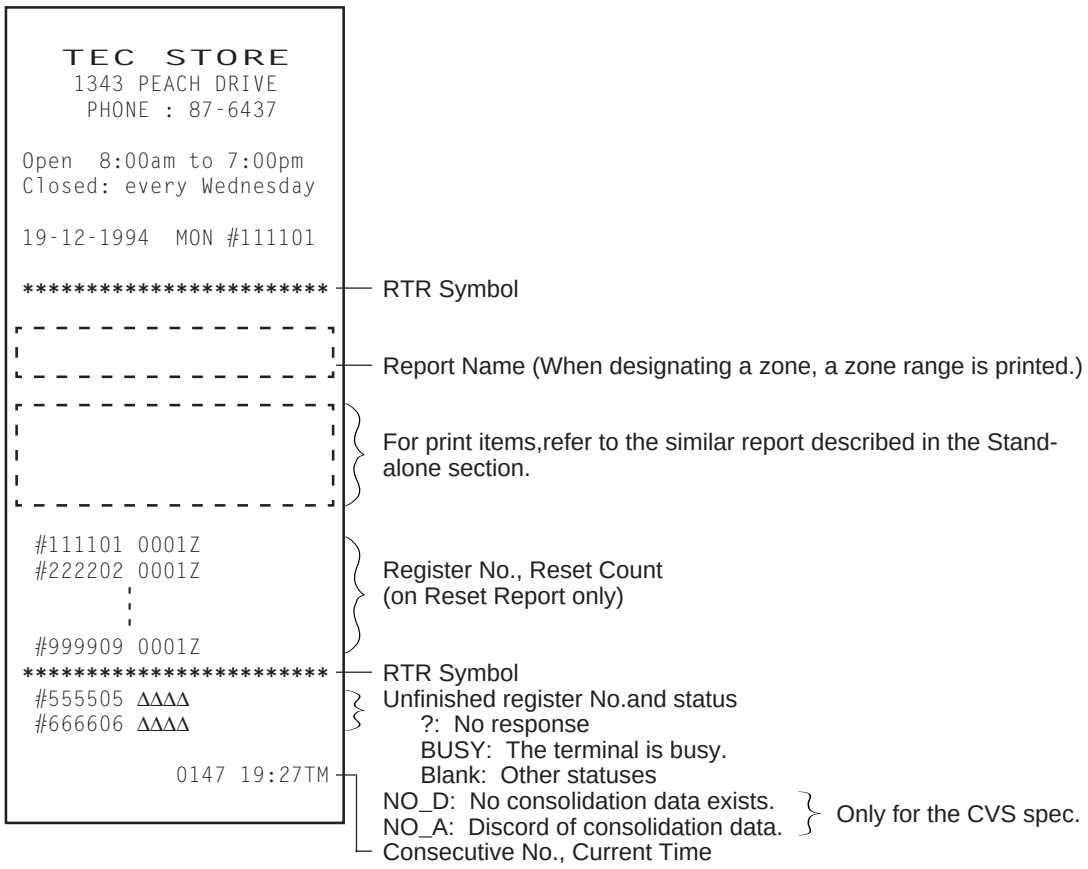
4.2.2 IN-LINE REPORT PRINT FORMAT

IN-LINE REPORT TYPE

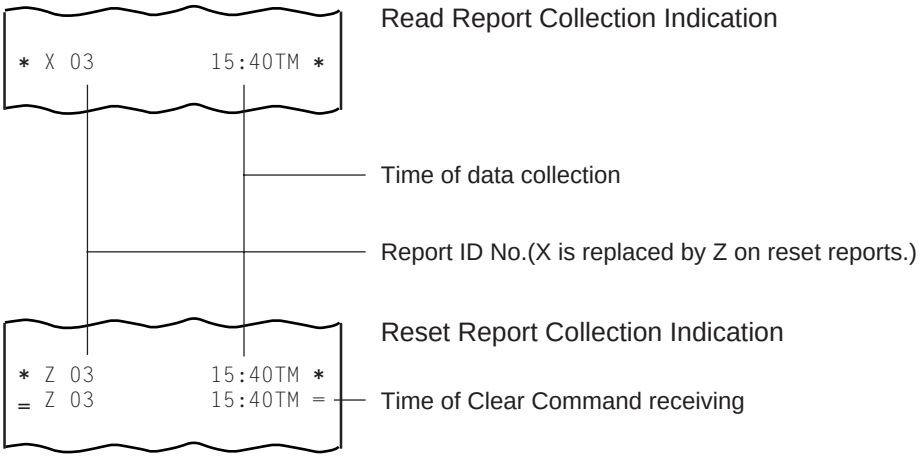
An in-line report can be classified into the following five types.

1. Collects data from each terminal to print a consolidation result:
   All Salesperson, Credit Card Company Sales, Department Group, Hourly Range, All Department, All/Zone PLU (Local File), and PLU Group Reports
2. Collects data from each terminal to print a collection result per terminal:
   Indiv. Terminal All Cashier Report (Non-floating Cashier)
3. Collects data from each terminal to print a collection result per terminal and then print the consolidation result:
   Financial, Media Sales & In-drawer and All Media Sales Total & Cash-in-drawer Reports
4. Creates a process data using consolidated data and prints a report:
   Indiv. Department, Department Gross Profit, Indiv. PLU, and Inactive PLU Reports
5. Prints data in the center file possessed by the master terminal:
   Indiv./All Cashier (Floating Cashier), All/Zone PLU (Local File), and All/Indiv./Inactive/ Debit/Credit Customer File Reports

The print format of each report is basically the same as the format of the corresponding standalone terminal report except that some indications are additionally printed as in-line operation job IDs. The following is print format example of the in-line report type 1 described above.



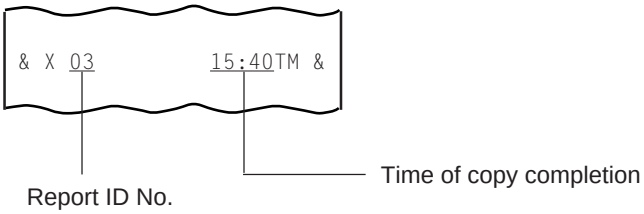
JOURNAL INDICATIONS ON INDIVIDUAL TERMINALS (when report data is collected)



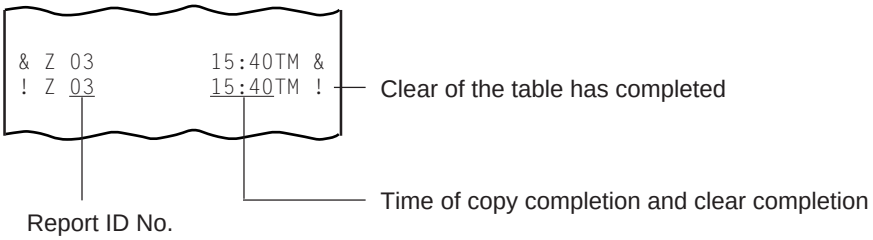
JOURNAL INDICATIONS FOR A SYSTEM WITH THE CVS SPEC. SELECTED

The following journal prints indicate that data in each table has copied into the communication buffer.

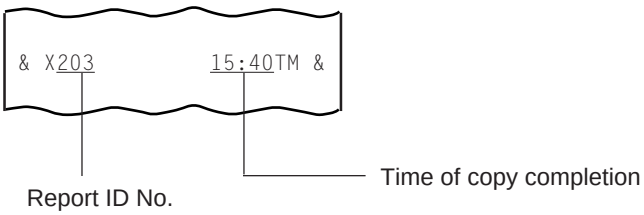
(1) Copy of daily read data has completed.



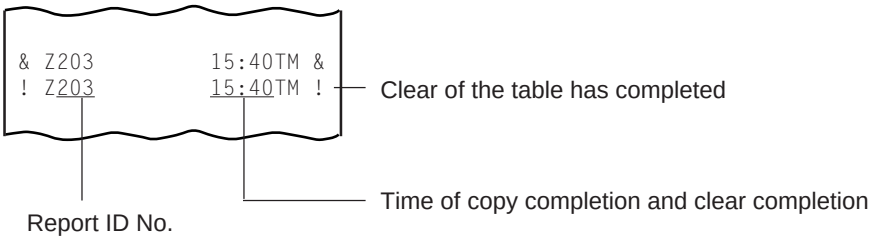
(2) Copy of daily reset data has completed.



(3) Copy of GT read data has completed.



(4) Copy of GT reset data has completed.



4.3 OPERATIONS AFTER IN-LINE REPORT TAKINGS

The following operations are available after taking in-line reports.

CONSOLIDATED REPORT DATA READ (REPRINT)

This operation issues the report data which is remaining in the Consolidation Memory of the Master Terminal.

OPERATION ON MASTER TERMINAL: Mode Lock: X/RTR Declaration: ON
90 **[AT/TL]**

When no consolidated data are remaining in the memory, this read operation is unavailable.

ENFORCED CLEAR OF HOLD CONDITION (on Individual Terminals)

This can be operated when the HOLD condition on a terminal can by no means be cleared because the terminal cannot receive a Clear Command from the Master Terminal for some reason (the Master Terminal becomes down, etc. before completion of the reset report data collection).

OPERATION ON ANY TERMINAL IN HOLD CONDITION: Mode Lock: Z
9999 **[AT/TL]**

On operating this, the HOLD condition is cleared, and allowing any key-in operations. However, this operation is regarded as an emergent measure to cope with such a trouble as the Master Terminal becomes down, etc. and thus no other solutions can be chosen, because the sales data memory of those reports can no longer be collected by the Master Terminal.

5. PROGRAMMING OPERATIONS

The system should be programmed fully by your local TOSHIBA TEC representative at the time of delivery according to the user's requirements so that daily operations can immediately start. However, some data must be added or changed daily or in a longer period. Since the volume of programming contents for the system is too large, this chapter and the following two chapters are provided as guide lines of the user's daily programming and maintenance operations. If there are any unclear points or program data other than listed here must be changed or added, please contact your TOSHIBA TEC representative. Please also note that some programming operations introduced in the Standalone Level are modified or not available on in-line terminals.

5.1 PROGRAMMING OPERATIONS COMMON WITH STANDALONE ECR LEVEL

The following is the table of programming operations which are introduced in the Manager's Guide for the Standalone Level and can be operated on in-line terminals as well, with the Submode No. and operation sequence unchanged. However, on in-line terminals, these are usually operated on the Master Terminal only and down-line-loaded (DLLed) to all the Satellite Terminals. Therefore, if any program data is changed, a DLL is further necessary to load the new data (after the change) to all the Satellite Terminals (to be described in Chapter 5).

PROGRAMMING JOB LIST

Master: Programming is available on the master terminal
(when the **[RTR]** key is turned on or the INLINE lamp is on).
Satellite: Programming is available on the master terminal
(when the **[RTR]** key is turned off or the INLINE lamp is off), the backup master terminal and the satellite terminal.

O: Available

Submode No.	Programming Job	Terminals	
		Master	Satellite
1	Store Name/Message, Commercial Message, Footer Logo Message Programming	O	O
2	Cashier Code and Name Programming	O	
4	PLU Table Programming	O	
5	Time Setting or Adjustment	O	O
6	Date Setting or Adjustment	O	O
8	Amount Limit Setting for Function Keys	O	O
15	Customer File Code (Check Track No.) and Name Setting	O	
20	Salesperson Code and Name Programming	O	
25	Link PLU Table Programming	O	
26	Tare Table and General Unit Weight Setting	O	
27	PLU Preset-code Key Setting	O	O
31	Display Message Programming	O	O
35	Negative Amount Key Limit Amount Setting	O	
40	PLU Price Dollar Discout/Extra Change Amount Setting	O	
No Sub-mode	Department Preset Price Setting or Changing	O	
	PLU Preset Price Setting or Changing, When Package Quantity Changing	O	
	% + and % - Preset Rate Setting	O	O
	Preset Rate Setting for Selective Itemizers	O	O
	Foreign Currency Exchange Rate Setting	O	
	Tax Table Programming	O	
	GTS Rate Setting	O	
	Store/Register No. Setting	O	O

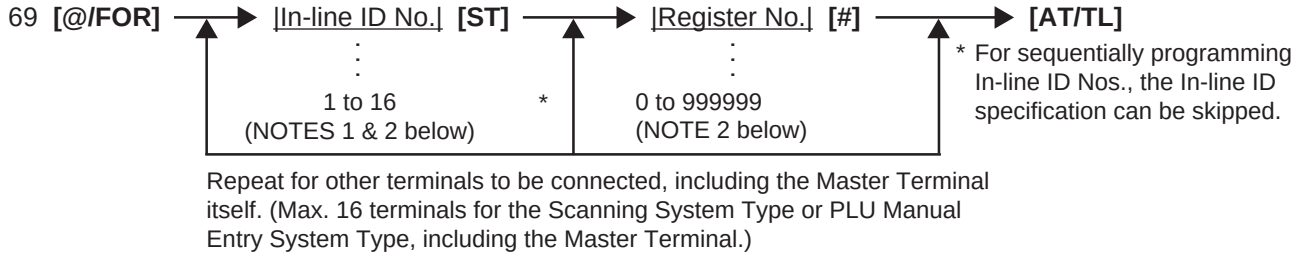
5.2 PROGRAMMING OPERATIONS ADDED FOR IN-LINE TERMINALS

5.2.1 TERMINAL CONNECTION TABLE SETTING (Submode 69; added for Master Terminal only)

This submode is required for in-line services. Enter the In-line ID No. and the Register No. of each terminal (including the Master Terminal) connected to the in-line cable.

CONDITION Any time outside a sale

OPERATION Mode Lock: SET and IN-LINE Lamp illuminated



NOTES:

1. *In-line ID No.: Master Terminal ..... 1 (fixed)*
   Backup Master Terminal (if connected) ..... 2 (fixed)
   Satellite Terminals ..... 3 to 16 (max.14 terminals)
2. *The In-line ID No. and Register No. of each terminal to be set here must be the same as those programmed for the terminal in IN-LINE TERMINAL ID SETTING (Submode 77) and STORE/ REGISTER NO. SETTING (no submode) in Chapter 6 in the Manager's Guide for stand-alone level.*
3. *To delete an individual terminal from the Terminal Connection Table, enter 0 in place of the In-line ID No. in the above operation pattern.*
4. *To delete the entire Terminal Connection Table once set, operate:*
   69 **[@/FOR]** → 0 **[AT/TL]**
5. *If a deleting operation (individual or entire deletion) is performed, the files occupied by the deleted terminal(s) (such as Floating Cashier File, etc.) is canceled.*
   Therefore, a deleting operation should be performed only when the system is to be re-built or a terminal is to be detached from the system.

ex.) To set a Master Terminal and a Satellite Terminal in the connection table (total of two terminals in the in-line system):

Master Terminal	ID No.1	Register No.111101
Satellite Terminal	ID No.3	Register No.333303

Mode Lock: SET/ and IN-LINE Lamp illuminated
69 **[@/FOR]**
1 **[ST]** 111101 **[#]** (for the Master Terminal)
3 **[ST]** 333303 **[#]** (for the Satellite Terminal)
[AT/TL]

```
TEC STORE
1343 PEACH DRIVE
PHONE : 87-6437

Open  8:00am to 7:00pm
Closed: every Wednesday

19-12-1994  MON #1

P69
01                #111101
03                #333303

              0014 14:21TM
```

5.2.2 TERMINAL ID SETTING (Submode 77)

This submode is available for in-line terminals (including the master and backup master terminals). It must be operated separately on each terminal since the Terminal ID should vary from terminal to terminal. The data set in this submode is used as the in-line address of the terminal for in-line service operations.

CONDITION Any time outside a sale

OPERATION Mode Lock: SET

77 **[@/FOR]** ⟶ |Terminal ID No.| ⟶ **[AT/TL]**

Assign No. of 1 to 16.
1: Master
2: Backup Master
3 to 16: Satellites

NOTE: *Be certain not to set the same terminal ID No. to terminals on the in-line system. If terminals with the same ID No. exist on the in-line system, malfunction may occur.*

ex.) To assign Terminal ID No. 4 to the terminal used as a Satellite Terminal of the in-line system:

Mode Lock: SET, enter 77, depress **[@/FOR]**. Enter 4, depress **[AT/TL]**

```
TEC STORE
1343 PEACH DRIVE
PHONE : 87-6437

Open  8:00am to 7:00pm
Closed: every Wednesday

19-12-1994  MON #1

P77
                    04

          0011 14:16TM
```

5.3 VERIFICATION OF PROGRAMMED DATA RELATED TO IN-LINE SPECIFICATIONS

The programmed data related to in-line specifications can be read for verification purposes. A receipt is issued for each operation with the programmed data printed.

CONDITION Anytime outside a sale (Sign OFF required under Cashier Signing Method)

OPERATION Mode Lock: X or SET
(RTR Declaration is unnecessary on the Master Terminal.)

- Terminal Connection Table .....169 **[AT/TL]**
- Terminal ID Setting .....177 **[AT/TL]**

NOTES:
1. *Verifications listed in the Operator's Guide of the standalone level are also available on all the terminals of the in-line system.*
2. *The verification of Terminal Connection Table can be executed on the Satellite Terminals after the DLL operation.*

6. DLL (Down-Line-Loading) OPERATIONS

In an in-line system (Master-Satellite system), most programming data are set on the Master Terminal and down-line-loaded (DLL) to Satellite Terminals. The DLL operations introduced in this chapter are pure DLLs, i.e. merely loading the data programmed in the Master Terminal to Satellite Terminals. DLLs automatically performed with programmed data changes are introduced in the next chapter (Chapter 6). If any other DLLs not introduced in this and next chapters are required, ask your TOSHIBA TEC representative. Please also note that TERMINAL DESIGNATION (see Chapter 2) can be operated prior to a specific DLL operation, to designate Satellite Terminals that receive the DLL.

DLL JOB LIST

Submode No.	DLL Job	Remarks
501	Store Name/Message, Commercial Message Programming	
502	Cashier Code and Name Programming	NOTE 1 below
504	PLU Table Programming	
505	Time/Date Setting	
508	Amount Limit Setting for Function Keys	
520	Salesperson Code and Name Programming	
525	Link PLU Table Programming	
526	Tare Table and General Unit Weight Setting	
527	PLU Preset-code Key Setting	
531	Display Message Programming	
535	Negative Amount Key Limit Amount Setting	
540	PLU Price Dollar Discount/Extra Charge Amount Setting	
569	Terminal Connection Table Setting	
500	%+ and %- Preset Rate Setting Preset Rate Setting for Selective Itemizers Foreign Currency Exchange Rate Setting Tax Table Programming GTS Rate Setting	

NOTE: *DLL is possible only when the non-floating cashier feature is used.*

CONDITION — Terminals including the Master: Any time outside a sale (NOTE below)
(Sign OFF condition is not necessary required for the Code Entry Method)

OPERATION — Satellite Terminals: Any position if the power is ON
Master Terminal: Mode Lock: SET
RTR Declaration: ON

|X X X| ⟶ **[AT/TL]**
Submode No.

PRINT FORMAT OF DLL OPERATIONS

Master Terminal Receipt

```
   TEC STORE
    1343 PEACH DRIVE
     PHONE : 87-6437

Open  8:00am to 7:00pm
Closed: every Wednesday

19-12-1994  MON #1

**********************
       P5XX
**********************
             0011 14:16TM
```

Satellite Terminals Journal

```
* P5XX          18:02TM *
```

Time of receiving the DLL

5xx = Submode No. of the specific DLL operation

NOTE: *As for a system with the CVS spec. selected, DLL is unavailable when the Satellite Terminals perform sales data copy into the communication buffers.*

7. DEPARTMENT AND PLU MAINTENANCE

In this chapter, adding, changing, or deleting operations related to Department Table and PLU Table program data are described. These are operated on the Master Terminal only.

- For a system with the feature “PLU not to be inquired” selected
  All of these operations are immediately loaded into Satellite Terminals.

- For a system with the feature “PLU to be inquired” selected
  PLU program data are immediately programmed in the center file of the Master Terminal, and Department Table data are immediately loaded into Satellite Terminals.

TABLE OF DEPARTMENT AND PLU MAINTENANCE OPERATIONS

7.1 PLU TABLE ADDITION/CHANGE/DELETION WITH DLL (Submode 63)

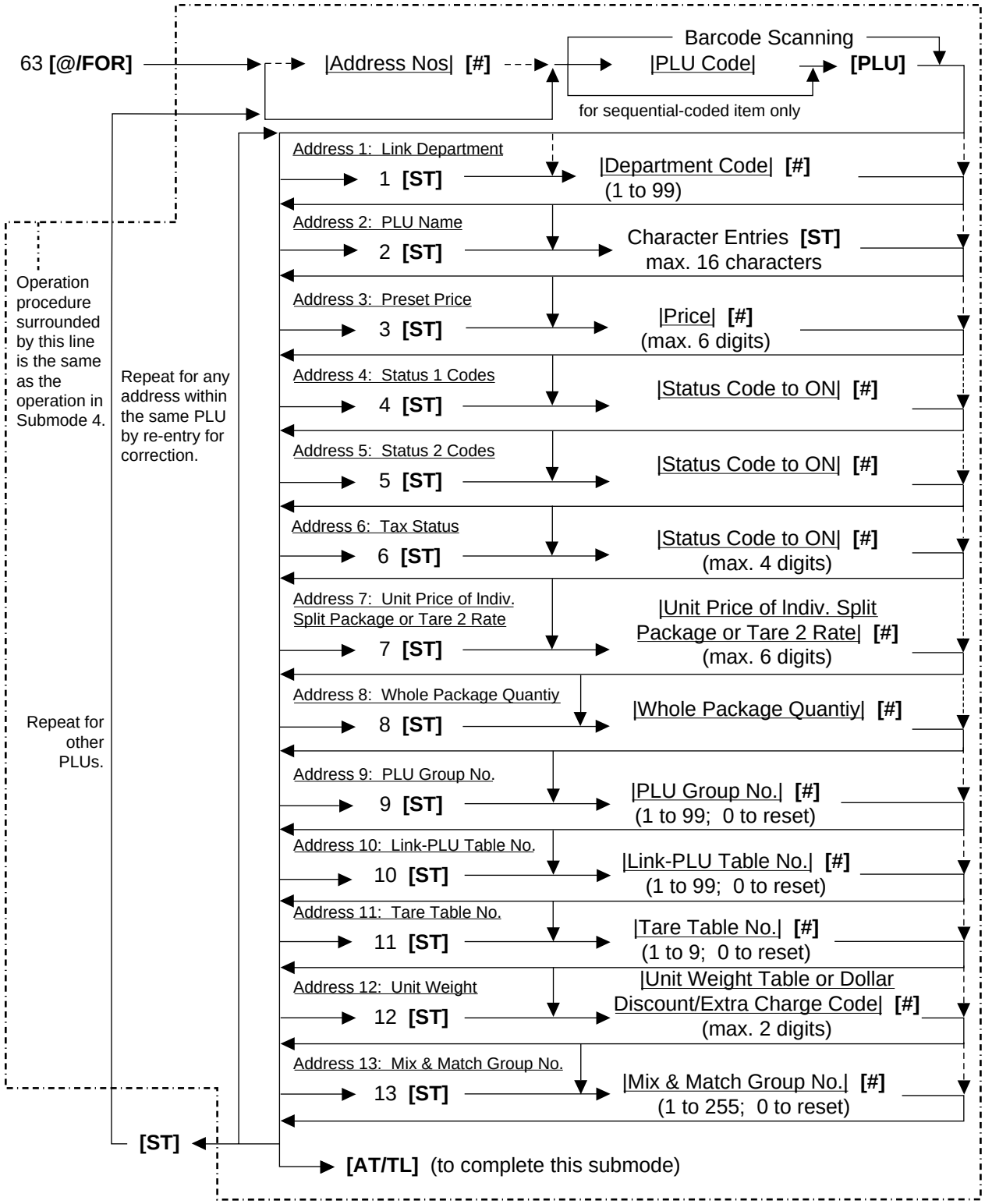
CONDITION

All the terminals: After PLU Daily and GT Resets
(when the feature "PLU not to be inquired" is selected)

Master terminals: Anytime outside a sale
(when the feature "PLU to be inquired" is selected)

OPERATION

Mode Lock: SET and IN-LINE Lamp illuminated



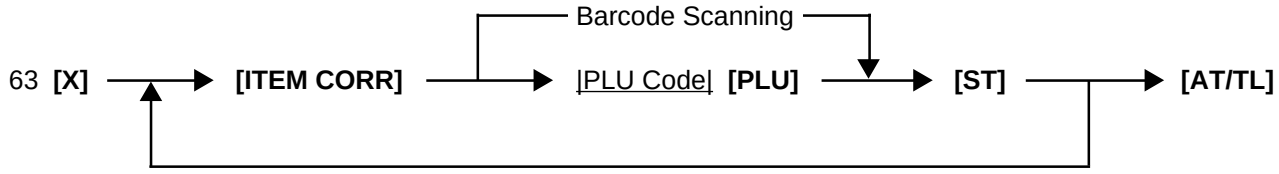
Deletion

CONDITION

The sales data of the required PLUs are zero and all terminals are outside a sale, programming, or report taking operations.
(when the feature “PLU not to be inquired” is selected)
The sales data of the required PLUs are zero and anytime outside a sale for Master.
(when the feature “PLU to be inquired” is selected)

OPERATION

Mode Lock: SET and IN-LINE Lamp illuminated



Repeatable for other PLUs to be deleted.

7.2 DEPARTMENT PRESET PRICE SETTING OR CHANGING WITH DLL (Submode 72)

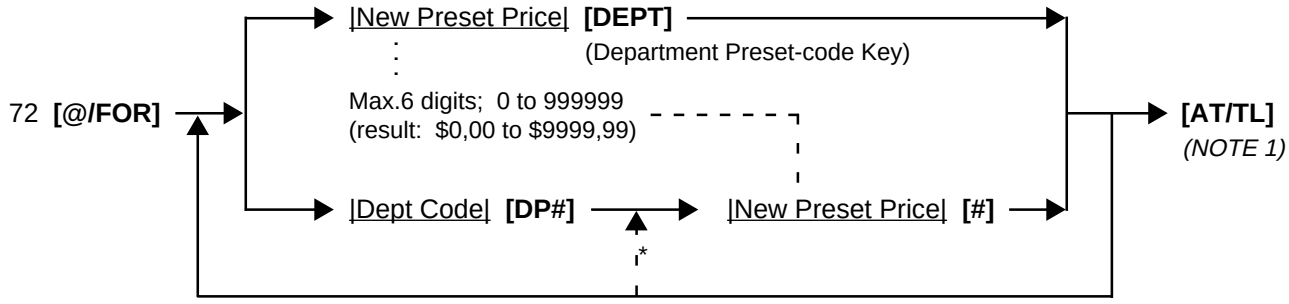
This submode is used to newly set or change preset prices to required departments, and loads the price data into Satellite Terminals.

CONDITION

Any time outside a sale for Master or Satellite

OPERATION

Mode Lock: SET and IN-LINE Lamp illuminated



Repeatable for other departments.

* For sequentially programming the department, the Dept Code specification can be skipped.

NOTES:

1. *When the **[AT/TL]** key is depressed in the above operation, it sends a DLL-start command to the designated terminals, makes the terminals in HOLD condition, and executes DLL. After DLL is completed, it sends a DLL-end command to each terminal and releases the HOLD condition.*
2. *When zero is entered as the New Preset Price value, the department is set with a zero price. When the New Preset Price entry is skipped and the **[DEPT]** or **[#]** is simply depressed, it will be an open-price department.*

7.3 PLU PRICE CHANGE WITH DLL (Submode 73)

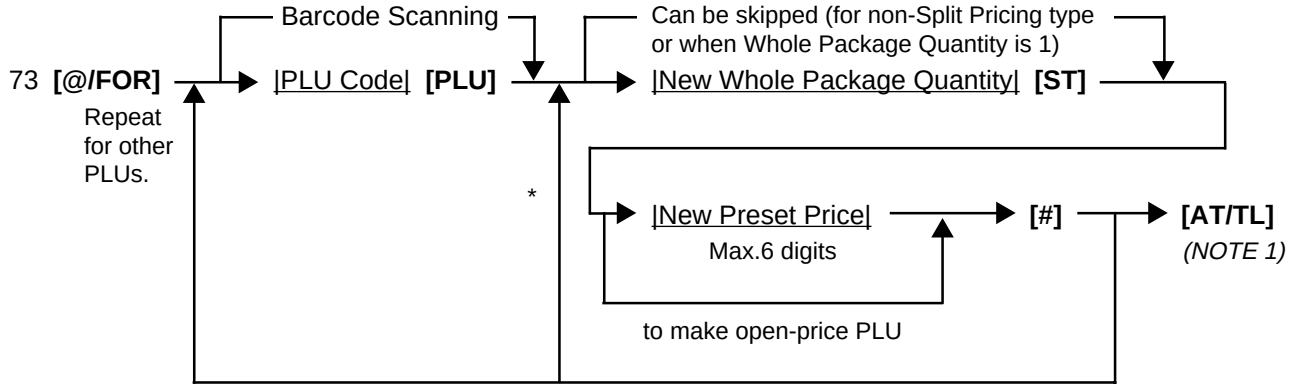
This submode is used to change prices of PLUs existent in the PLU files, and to immediately load the data into Satellite Terminals.

CONDITION

Any time outside a sale for Master or Satellite
(when the feature "PLU not to be inquired" is selected)
Anytime outside a sale for Master (When the feature "PLU to be inquired" is selected)

OPERATION

Mode Lock: SET and IN-LINE Lamp illuminated



* (Repeatable from here for sequentially programming PLU Codes.)

NOTES:

1. *When the **[AT/TL]** key is depressed in the above operation, it sends a DLL-start command to the designated terminals, makes the terminals in HOLD condition, and executes DLL. After DLL is completed, it sends a DLL-end command to each terminal and releases the HOLD condition.*
2. *A maximum of 100 PLUs' prices can be changed in one operation sequence of this submode.*
3. *When zero is entered as the New Preset Price value, the PLU is set with a zero price. When the New Preset Price entry is skipped and the **[#]** is simply depressed, it will be an open-price PLU.*

8. INQUIRIES

This chapter describes various inquiries made from each terminal to the Master Terminal and affect data (sales data updating).

8.1. PLU INQUIRIES

When the feature “PLUs to be inquired” is selected and a PLU is entered in a sale (entered manually or through a barcode) on each terminal, the terminal inquires the PLU to the Master Terminal. The inquired Master Terminal searches the PLU code in the PLU Main Table and the PLU Additional Table.
When the PLU exists, the Master Terminal responds the price, name, and other required data to the inquiring terminal.
When the applicable PLU code does not exist in the Master Terminal, the message “CODE ERROR” (standard program; programmable) is displayed on the inquiring terminal.

PLU URGENT MAINTENANCE

When the inquired PLU code does not exist in the Master Terminal, the PLU can be programmed into the Master Terminal (and the Backup Master Terminal) along with its sale entry on the terminal by entering the linked Department and the price. The PLU thus entered is temporarily programmed in the PLU Additional Table.

AFFECT
When a PLU entry is determined on a terminal, the terminal sends an AFFECT text to the Master terminal (and Backup Master Terminal), and updates the sales data of the Master Terminal (and Backup Master Terminal).

8.2. CUSTOMER FILE (CHECK TRACK) INQUIRIES

When the feature “Customer File (Check Track)” (instead of PB Manual Entry) is selected and a PICK UP BALANCE (by **[PICK UP BAL]**) is entered on a terminal, the terminal inquires the entered Customer File Code to the Master Terminal. The inquired Master Terminal searches the Customer File Code in the Customer File Table.
When the Customer File Code exists, the Master Terminal responds the name and the previous balance of the Customer File to the inquiring terminal.

NEW CUSTOMER FILE INQUIRIES

When a NEW CUSTOMER FILE (by **[CODE OPEN]** key) is entered on a terminal, the terminal inquires the new Customer File code entered to the Master Terminal. The Master Terminal confirms that the inquired Customer File code does not exist, then adds it to the Customer File table, and responds to the inquiring terminal that the code has been additionally set. (If a Backup Master is connected, the code inquiry to and additional setting in the Backup Master Terminal occur at the same time.)

AFFECT
When a Customer File entry is determined on a terminal, the terminal sends an AFFECT text to the Master Terminal (and Backup Master Terminal), and updates the sales data of the Master Terminal (and Backup Master Terminal).

NOTE: *When the applicable file code does not exist on a Customer File Code inquiry (by **[PICK UP BAL]**) or when the applicable file code exists on a New Customer File Code inquiry (by **[CODE OPEN]**), the message “CODE ERROR” (standard program; programmable) is displayed on the inquiring terminal.*

8.3. CREDIT CARD No. INQUIRIES TO THE NEGATIVE CHECK FILE

When the “Negative Card Check” feature is selected by program option, each terminal inquires to the Master Terminal whether the entered Credit Card No.is acceptable or not. The Master Terminal, thus inquired, searches the Card No. in the Negative Card File.

When the applicable Card No. exists in the Negative Card File, the Master Terminal responds to the inquiring terminal the response message “CALL MANAGER” (standard program; programmable) displayed in the Dot-display Windows with the Error Status Code (programmable) in the 7-segment Windows on the inquiring terminal to indicate that the Card No.is not acceptable.

8.4. CASHIER OCCUPY INQUIRIES

When the “Floating Cashier” feature is selected and a Cashier Code is entered on a terminal, the terminal inquires the cashier code corresponding to cashier code entered to the Master Terminal. The Master Terminal searches the Cashier Table of the Cashier No. in the Cashier File.

When the the Cashier No. exists and its table is not occupied by any other terminal, the Master Terminal makes the cashier in the occupied status and sends the cashier table to the inquiring terminal.

When the Cashier No. does not exist in the Master Terminal’s Cashier File, the Master Terminal responds the message “CODE ERROR” (standard program; programmable) to the inquiring terminal. When the Cashier Table is occupied by another terminal, the message “OCCUPY” (standard program; programmable) is responded instead.

AFFECT

When a sale entry is determined (i.e. finalized) on a terminal, the terminal sends AFFECT text to the Master Terminal (and Backup Master Terminal) and updates the sales data (in the Cashier Table) of the Master Terminal (and Backup Master Terminal).

CASHIER CANCEL INQUIRES (OCCUPY CANCEL)

When a Sign-OFF is operated on a terminal, the terminal inquires a CASHIER CANCEL to the Master Terminal. The Master Terminal cancels the occupied status of the applicable cashier.

9. BACKUP FUNCTION

(ONLY WHEN THE BACKUP MASTER IS CONNECTED)

(1) Function

- By connecting the backup master terminal (BM), the various files stored in the master terminal (M) can be backed up.

- The terminal assigned to ID No. 2 will function as a backup master terminal (BM). By programming ID No. 2 in the terminal connection table and downloading this data to each terminal, the system will function as a system in which the backup master terminal (BM) is connected.

- By changing terminal ID from 2 to 1, the backup master terminal (BM) will function as the master terminal (M).

<Files to be Backed Up>

PLU Main Table (When the PLU inquiry function is used)	Program data Sales data
PLU Additional Table (When the PLU inquiry function is used)	Program data Sales data
Link PLU Table (When the PLU inquiry function is used)	Program data
Cashier Table (When the floating cashier system is used)	Program data Sales data
Customer File (Check Track) Table	Program data Sales data
Negative Code Table	Program data
PC Transmission Information Table	Program data

NOTES: *1. Data capture (DC) transaction files are not backed up.*
2. The tables (center files) managed by the master terminal (M) and used by each terminal via inquiries and PC transmission information tables are backed up.

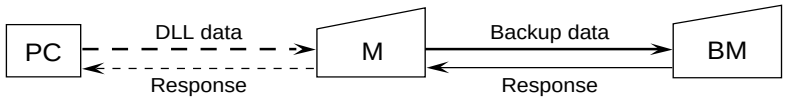
- Sales data is backed up on a real-time basis.
  When sales data of the master terminal (M) is updated, sales data of the backup master terminal (BM) is updated at the same time.

- Backup data check function:
  Correspondence between the center files and backup data is checked every certain period of time.

- Backup data update process:
  When an error occurs in backup data, the following processing methods can be selected according to the program option setting.
  (1) Automatic data copy
  When the version of the center file stored in the master terminal (M) is different from that stored in the backup master terminal (BM), registration jobs are automatically prohibited, the backup data is properly exchanged.
  While updating the backup data, each inquiry from the terminals may result in a “MASTER IS BUSY” error.
  (2) Manual data copy
  When the version of the center file stored in the master terminal (M) is different from that of data stored in the backup master terminal (BM), the master terminal (M) gives a short beep at the timing of issuing the long receipt to warn that the data is not backed up properly.
  The operator should update the backup data manually.

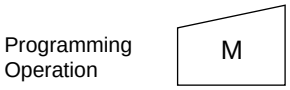
(2) Procedure

1) Changing Program Data (DLL from the PC)



- When various center files from the PC are received via DLL, the master terminal (M) backs up program data and sales data of the backup master terminal (BM) automatically and sends the result to the PC.

2) Changing Program Data (Operated on the Master Terminal)



- When various center files are being programmed on the master terminal (M), the backup error flag of the relevant file is turned on. (At this time, backup data is not updated.)

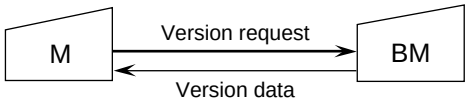
* For details about the backup error flag, refer to 5) Backup Error Flag.

* For an explanation of the backup data update process, refer to 6) Backup Data Update Process.

3) Updating Sales Data

- For details about updating sales data, refer to the explanation of each of the control functions described in Chapter 7.

4) Checking Backup Data



- The master terminal (M) sends the version request command to the backup master terminal (BM) every certain period of time and receives version information about the backup data.

- The master terminal (M) checks correspondence between the version information received from the backup master terminal (BM) and the center files (stored in the M). If an abnormality is found, the backup error flag is turned on.

- When a master job is being performed on the master terminal (M) (**[RTR]** key turned on), or a PC job is being performed backup data is not checked.

5) Backup Error Flag

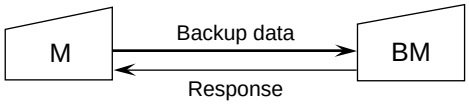
- When there is any difference between the data stored in the master terminal (M) and the backup data stored in the backup master terminal (BM), the master terminal (M) turns on the backup error flag of the file in which a difference was found.

- There are following five cases when the backup error flag is turned on.
  ① The master terminal (M) changes the programming of the center files.
  ② A version error is found at the backup data check.
  ③ The backup job fails after the center file has been downloaded from the PC.
  ④ Updating of the backup data fails after the center files have been reset.
  ⑤ Mergence of backup data is not correctly performed by PLU merge operation (when the feature “PLU to be inquired” is selected).

- While the backup error flag is on, the following operation is performed.
  ① The master terminal (M) gives a short beep at the timing when the long receipt is printed to warn that a backup error has occurred.
  ② The RTR declaration cancel operation results in compulsory manual data copy error. (The error indication “PLEASE BACK UP” is displayed.)
  In this case, the RTR declaration is not canceled until the manual data copy operation is performed.

- There are two timings cases the backup error flag is turned off.
  ① The backup data is properly backed up according to the backup data update process.
  ② The backup master terminal (ID No. 2) is deleted from the terminal connection table.

6) Backup Data Update Process
(This is a process required when the backup data stored in the backup master terminal (BM) is not updated properly due to an error.)



- The method processing backup error is selected according to the program option setting. Even if the automatic data copy operation is selected, data copy can be performed manually.
  ① Automatic data copy (program option)
  When the backup error flag is on (or turned on), the master terminal (M) automatically sends to the backup master terminal (BM) the file in which the error has occurred, and updates the backup data.
  ② Manual data copy (program option)
  The backup data is updated by the manual operations of the operator.

* When the backup data is being updated, inquiries from terminals may result in a “MASTER IS BUSY” error.
* When a “MASTER IS BUSY” error occurs, clear the error using the **[C]** key. Then, update the backup data again after the master job (backup process) is complete.
* Only the files with the backup error flag turned on are sent to the backup master terminal (BM) to update the backup data.
* When the master job is being done on the master terminal (M) (**[RTR]** key is turned on), backup data is not checked or updated.
* If the backup error flag is on when the master job is complete on the master terminal (M) (**[RTR]** key is turned off; the INLINE lamp is off), manual data copy becomes compulsory.

7) Manual Copy of Backup Data

OPERATION ON MASTER TERMINAL: Mode Lock: Z and IN-LINE Lamp illuminated

900 **[AT/TL]**

10. DATA CAPTURE FUNCTION

(1) Function
To make it possible to transfer data to the PC, the details of registration jobs performed on each terminal are pooled in the master terminal (M) as transaction data.

(2) Buffering Transaction Data
When a terminal performs the finalize operation, transaction data entered in registrations is sent to the master terminal (M). The master terminal (M) receives the transaction data and pools it in the transaction buffer.
The transaction data is controlled usually in two buffers. One is for buffering transaction data and the other is for collecting data from the PC. (When one buffer becomes full, or when the collection request is issued from the PC, the buffer in use is released for the PC, and the other buffer is used for subsequent buffering.)

(3) Collecting Transaction Data
The transaction data stored in the master terminal is sent to the PC according to the request from the PC. If the buffer becomes full when the master terminal receives the transaction data request command from the PC, the transaction data of the full buffer is sent to the PC. If the buffer is not full, the transaction data in the buffer (the buffer used for buffering) is sent to the PC.

(4) Processing when the Transaction Buffer is Full
When transaction data is received from the terminal (BM, S), the master terminal checks the vacant area of the transaction buffer. If the received transaction data cannot be stored in the buffer, the master terminal sends to the terminal a response indicating that the buffer is full. The terminal receiving this response, performs journal printing indicating that the transaction data is missing.

(5) Supplementary
- Only when the transaction data capture function is selected by program option, transaction data can be sent/received and buffered.
- There is no warning reporting the remaining capacity of the transaction buffer.
- Once the transaction data collection command is issued, data in one buffer is collected. (When data in two buffers is required, this command should be issued twice.)

11. MASTER AND BACKUP MASTER ALTERNATION

The Backup Master Terminal can be changed to be used as the Master Terminal for an accident that the Master Terminal becomes down, etc. And the Master Terminal can be changed to be used as the Backup Master when it comes back from repair, etc.

To switch from the Backup Master Terminal function to the Master Terminal function:

① Disconnect the master terminal from the line.
② When other terminals are in registration operation, finalize and cashier sign-off, or Cashier Key to OFF operations should be performed.
Since a transmission error occurs at this time, an inquiry job should be completed.
③ Change the backup master terminal address from 2 (BM) to 1 (M). (Therefore, the backup master terminal will function as the master terminal.)
Refer to TERMINAL ID SETTING (Submode 77) on Chapter 4.
④ Delete the backup master terminal from the terminal connection table on the master terminal. (Reprogramming is required.)
Refer to TERMINAL CONNECTION TABLE SETTING (Submode 69) on Chapter 4.
⑤ Download the terminal connection table.

The following files are guaranteed when the recovery process is performed. If a file is used in another terminal when the master terminal goes down, however, data stored in the terminal is not guaranteed.

- Files controlled in the master terminal (PLU file, cashier file, etc.)
- PC transmission information

The following files and data are lost when the master terminal goes down.

- Transaction file for data capture
- Files controlled locally on the master terminal
- Data in the files which are used by other terminals when the master terminal goes down.

12. TRANSMISSION ERROR

When a terminal makes an inquiry but a communication error occurs for some reason and the inquiry to the other station is not possible, the message “IRC CONNECT ERR” (standard program; programmable) is displayed on that terminal and operation is stopped.
When the Master Terminal cannot access the inquiring file because the Master Terminal is receiving DLL data, the backup data is being updated between the Master and the Backup Master terminals, etc., the message “MASTER IS BUSY” (standard program; programmable) is displayed and operation is stopped.

12.1. CAUSE OF ERROR

12.1.1 “IRC CONNECT ERR”

a) Communication with the other station is not possible due to a connection error (cable cut, Master Terminal’s Power-OFF, etc.).
b) Comminication was made, but due to a text error, the other station cannot recognize it correctly.

12.1.2 “MASTER IS BUSY”

Cannot access the inquiring file due to the following causes:
a) The Master Terminal is receiving DLL data from the PC.
b) Programming operations are under way on the Master Terminal.
c) Backup data updating process is under way.
d) Read/Reset Report taking operation is under way on the Master Terminal. (inapplicable to a system with the CVS spec.selected)
e) ULL operations are under way on the Master Terminal.
f) In a system with the CVS spec.selected,copy of the relevant table into the communication buffer area is under way on the Master Terminal.

12.2 ERROR DISPLAY

IRC CONNECT ERR

<16-digit Dot Windows>

Terminal ID of the other station

MASTER IS BUSY

<16-digit Dot Windows>

NOTE: *The display contents in the 7-segment portion remains the same as before the error occurrence. The error status will be canceled by the* ***[C]*** *key.*

12.3 ERROR CANCELING PROCESS

There are two error-canceling processes in accordance with the inquiring job contents.

Type 1: Depressing the **[C]** key will return to the statuses before the inquiry.
Applicable Jobs:

- PLU Inquiry
- PLU Urgent Maintenance
- Customer File (Check Track) Inquiry
- Credit Card No. Inquiry to the Negative Check File
- Cashier Occupy Inquiry

Type 2: Depressing the **[C]** key will cancel the error status, displays the following message, and waits for RETRY or CANCEL.
Applicable Jobs:

- PLU Affect
- Customer File Affect
- Cashier Affect
- Cashier Cancel Inquiry
- Transaction Data Send

<16-digit Dot Windows>

For Retry ..... **[AT/TL]** (Performs re-sending to the other station.)
For Cancel ..... **[X]** → **[ST]** (Stops the inquiry, printing on journal "** X → ST **")

NOTE: *The "Cancel" in Type 2 above is for only the case the other station is in trouble which cannot be recovered by a Retry operation.*

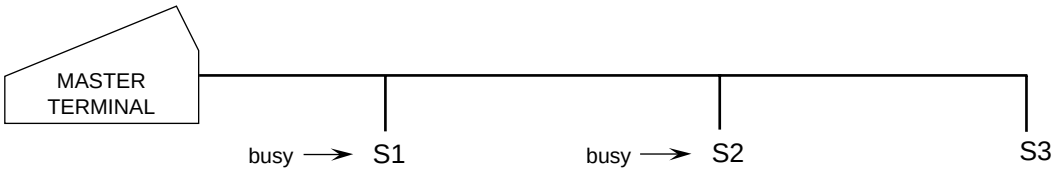
13. OTHER OPERATIONS RELATING TO IN-LINE SERVICE

The followings are other operations relating to in-line service operations.

13.1 TIME OUT

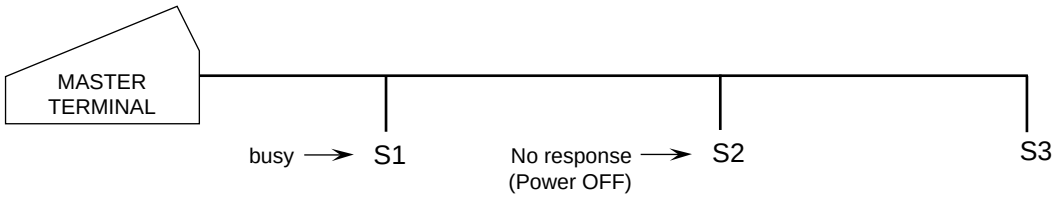
A Time-Out condition arises when the Master Terminal is making an in-line service operation, such as X/Z report collection, DLL, etc. to the Satellite Terminals. The service timer is provided for servicing each of the Satellite Terminals, thus on exceeding the time limit, a Time-Out condition will occur. In this case, a “RETRY”, “SUSPENDING”, “INCOMPLETE ENDING”, or “CANCEL” operation will be accepted.

ex. 1) In a system with a Master Terminal and 3 Satellite Terminals:



When a report collection is executed on the Master Terminal, a series of data collections from each terminal (S1 to S3) will be performed, but services for S1 and S2 will be skipped due to their “busy” conditions. Thereafter, services will again be attempted to S1 and S2. As a limit of 30 seconds is provided for servicing each terminal, the total service time in this case will be 30 sec. x 2 units = 60 sec. If data collection is successfully done from S1 within this time limit, servicing S2 follows for the rest of the time, and on reaching the time limit, the Time-Out condition arises, displaying on the Master Terminal the number of not-yet collected terminal(s) and the Store/ Register No. of the last serviced terminal. On this stage, the operator may only go on to “SUSPENDING” (to wait for a while until S2 clears the “busy” condition), or to “RETRY” (to execute collection service to S2 again, expecting that S2 has already cleared the “busy” condition), or to “INCOMPLETE ENDING” (to abandon the service to S2 and end with collection of the data of so-far collected terminals only), or to “CANCEL” operation. If “RETRY” is operated, the service time now is 30 seconds because only one terminal remains uncollected.

ex. 2)



In this case, S2 is in a “No response” condition and S1 is in a “busy” condition. As only one terminal is responding with some kind of status, a time out limit of 30 seconds is given (the “No response” status is not subject to the service timer). However, if S2 turns into a “Power ON” condition, it will also be subject to the service timer.

13.2 SUSPENDING

This is to be operated for the purpose of suspending an in-line service being executed, when any terminals remain unserviced, and of going on to a “RETRY”, “INCOMPLETE ENDING”, or “CANCEL” operation as the next step.

OPERATION ON MASTER TERMINAL: (Same Lock positions as the in-line job being performed)

Depress **[ITEM CORR]** until the key-in tone is generated.

DESCRIPTION:

The SUSPENDING operation is allowed any time during an in-line service procedure.
If suspending by the **[ITEM CORR]** key is accepted, the Master terminal’s display indicates the number of unserviced terminals. (SUSPENDING of a service execution of one terminal is not possible). Now a “RETRY” or “INCOMPLETE ENDING” operation can be selected as the next step. (When no key-in operations are made in about 10 seconds after a SUSPENDING operation, a RETRY process will automatically be executed.)

13.3 RETRY

This is to be operated for the purpose of re-attempting the in-line service that has been stopped due to “TIME OUT” or that has just been suspended by “SUSPENDING” operation.

OPERATION ON MASTER TERMINAL: (Same Lock positions as the in-line job being performed)

Depress **[AT/TL]**.

DESCRIPTION:

The in-line service will again be attempted to the unserviced terminals. This operation is possible any number of times after a “TIME OUT” condition or a “SUSPENDING” operation as long as any terminals remain unserviced. (When no key-in operations are made in about 10 seconds after a SUSPENDING operation, a RETRY process will automatically be executed.)

13.4 INCOMPLETE ENDING

This is to be operated to abandon services to unserviced terminals, and ends the in-line service with the services to service-completed terminals only.

OPERATION ON MASTER TERMINAL: (Same Lock positions as the in-line job being performed)

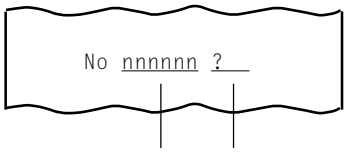
Depress **[NS]**.

DESCRIPTION:

If an in-line service being executed does not seem to end normally due perhaps to some abnormal status of any Satellite Terminals after “TIME OUT”, “SUSPENDING”, and/or “RETRY” operations, the **[NS]** key can be depressed to end the in-line service with only the service-completed terminals serviced and the unserviced terminals remaining unserviced. In case of In-line X or Z Report Collection sequences, reports of only the service-completed terminals will be issued.

As part of the print out, the Store/Reg. No. of the terminal and its status will be printed.

Status Print Format



Store/Register No. Status Symbol
?: No response (power off, etc.)
BUSY: The terminal is busy (during a sale, etc.)
Blank: Other statuses

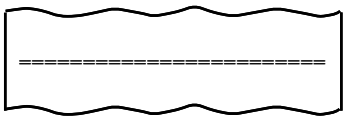
13.5 CANCEL

This can be operated when a SUSPENDING condition arises due to a TIME OUT or a SUSPENDING operation. The entire in-line service being performed is canceled. This operation is effective to in-line read report operations but not to any in-line reset report operations.

OPERATION ON MASTER TERMINAL: (Mode Lock: X)
Depress **[@/FOR]**.

DESCRIPTION:
The CANCEL symbol is printed as in the following.

CANCEL Print Format



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